Antigua

The 108 square mile island of Antigua with its 70,000 population is divided into six medical districts. Each district is manned by a district medical officer who is responsible for the delivery of primary health care to the residents of the district. There are four main health centres and seventeen sub-centres from which these district medical officers operate. The health centres and sub-centres are staffed by public health nurses, district nurse/midwives and community health aides who deliver primary health care not only in the centres but also in the homes of the ill and aged. The nursing staff on the districts work in close collaboration with public health inspectors also assigned on a district basis. Health educators and family planners carry out a total service from a central office in the city.

The services offered in the health centres and sub-centres range from medical and dental clinics to maternal and child health clinics to include pre- and post-natal care, well baby clinics, diabetes and hypertension, accident and first aid care, nutrition education classes, family planning and counselling, psychiatric clinics, special clinics to include VD etc. and immunization.

This system is supported by a 200 bed general hospital which not only provides secondary and tertiary levels of care but also houses the supportive diagnostic and therapeutic services.

ANT 1 **HOLBERTON HOSPITAL**

Enquiries: Deputy Hospital Administrator, Holberton Hospital, St John's.
Tel: 20251.

Managing agency: Ministry of Health and Public Information

General details: 1)Sep-Jun 2) 60 3) 80f 4)English 5)Students from other countries have not as yet been accepted.

Courses:

** DISPENSING
3-year course for dispenser, to provide qualified dispensers for hospitals.
GCE 'O' level in 3 subjects.

** NURSING
3-year course in nursing, for the qualification Registered Nurse.
GCE 'O' level in 3 subjects.

*** MIDWIFERY
1-year course in midwifery, for the qualification Registered Midwife.
Registered nurses.

Australia

The State and Territorial Governments of Australia have health authorities that operate autonomously at that level, and are concerned with the delivery and administration of health care. Health care functions are also carried out by local government, semi-government instrumentalities, voluntary agencies, profit-making non-governmental organizations, private medical and allied health professionals. Broadly speaking, there is a definite division between the public and private sector in the sources of finance and the provision of services. Most institutional care is provided by government, whilst diagnostic and curative services are predominantly supplied by private individuals and businesses.

Forty four per cent of total health care expenditure in Australia is met by the Commonwealth Government. An increased emphasis has been placed on the planning of services in order to effect a more equitable distribution of health care resources, and based on the need to curtail escalating health care expenditure, which in 1976-77 was 7.6 per cent of gross domestic product.

Primary health care is one interrelated aspect in a complex variety of health services available to most Australians, and is usually separated from the provision of institutionally-based care. The main agent of primary care is the general practitioner, whether he operates individually or as a member of a multi-disciplinary team. Most referrals to other sources of care are made at that point. A limited amount of primary medical care is provided in out-patient departments in hospitals.

With the inception of the Community Health Programme in 1973 there has been a marked and deliberate emphasis on the development of multi-disciplinary teams in the provision of community-based health care. Primary care can be, but is not necessarily, an integral part of the services provided (even in large health centres), although teams may incorporate different levels of care, or involve referral networks of a secondary or tertiary nature located in a community.

The programme's objective is the provision of high-quality, readily accessible, co-ordinated and efficient health, and health-related welfare services at local, regional, state and national levels. It was stated at the outset of the programme that a key component is primary care. The programme has highlighted the need to establish close relationships between primary health care and supportive services so that comprehensive and co-ordinated health services can be provided for local communities. Co-ordinated community-based health services include prevention, early treatment, health education and after-care as part of health care delivery.

Emphases in the development of services include priority for areas of greatest need, community acceptance of services, the importance of inter-disciplinary education programmes, co-ordinated or integrated with service functions, and the need for continuing evaluation and sharing of information. (It is to be noted that not all community-based health services come under the auspicies of this programme, but the programme is the major initiative for the support of community health services.)

Changes of emphasis in the delivery of health care in Australia have inevitably had an impact on health personnel and their roles. The range of health care providers has become more diverse, and inter-relationships between providers have seen shifts and adjustments. In some situations, less elaborately trained types of health personnel have entered the health care field to cope with rising needs and demands at a lower cost.

More attention is being accorded to general practice in undergraduate medical training through the influence of the Royal College of General Practitioners, and the earmarked financial support of the Universities Commission. There has been increasing recognition that there are inadequacies in the hospital training given to the majority of doctors, and some resultant modifications have occurred in medical education.

The development of community medicine courses has some ramifications

for the organization and emphases of primary health care. Several Departments of Community Medicine in universities around Australia have been set up for service, teaching, and research at the postgraduate level. These departments study and teach the principles of organizing health care services in a defined community, identifying needs, detecting illness in its early stages and helping to arrange for its management. With the emphasis on integrating medical, preventive and supportive care, areas in which the community physician applies this education include general medical practice, community nursing, the geriatric and rehabilitation sources, counselling sources of many kinds (such as drug and alcohol programmes, family planning and marriage guidance, mental health, and maternal and child health services). The community physician has in some cases, especially in New South Wales, developed an administrative and overview role at the regional level in community health services.

In the Australian setting, the nurse is accepted as having a complementary role to that of the doctor. The nurse may in some circumstances be the person of first contact with the patient, and make referrals; or she may carry out some medical as well as nursing duties. The role of the nurse is being broadened and developed in a wide range of community services, in the field of health education, prevention of disease, treatment, and rehabilitation.

A range of services to back up the primary health care providers is increasingly available at the community level: these include social workers, who may be involved in a specialized facet of, or in a general role in, community health; pharmacists with a drug educative and preventive role in the community, sometimes with an informal referral role if other health care seems appropriate; rehabilitative therapists such as physiotherapists, occupational therapists, who are increasingly adopting a psycho-social role; and some speech therapists. Other personnel have important roles in community health, such as health educators, psychologists and psychiatrists. In some cases a range of specialist services may be provided on a consultative basis as part of the community health team concept. A new type of health worker known as a paramedical aide has been fostered in one particular State, trained to fill an auxiliary role to many types of health personnel.

AUS 1 **ANAESTHETICS**

Postgraduate — Two-part diploma course in ANAESTHESIA at Melbourne University, for graduates of 2 years standing from B Med and B Surg.

Professional — Postgraduate education in ANAESTHETICS is conducted at a national level by the Faculty of Anaesthetics of the Royal Australasian College of Surgeons (see AUS 61), who are responsible for the education, training and examination of graduates in anaesthetics. The Diploma of Fellowship of the Faculty is recognized as the appropriate Australian qualification in the speciality.

AUS 2 **ANATOMY**

Postgraduate — No postgraduate courses in this specialization, although it forms a major part of all university courses in medicine and surgery.

AUS 3 **BIOCHEMISTRY**

Postgraduate — Courses (master's degree unless otherwise indicated) at the following: BIOCHEMISTRY (1-2 years), Deakin University; BIOTECHNOLOGY, New South Wales University; CLINICAL BIOCHEMISTRY (2 year diploma), New South Wales Institute of Technology, Western Australia University.

PhD degrees in BIOCHEMISTRY, Deakin University; BIOLOGICAL TECHNOLOGY, New South Wales University.

AUS 4 BIOLOGY

Postgraduate — Master's degree in BIOLOGY, Deakin University; 1-year diploma in NATURAL RESOURCES, Western Australian Institute of Technology. Research facilities for M Phil and PhD in BIOLOGY at Murdoch University.

AUS 5 BIOMEDICAL SCIENCE

Postgraduate — 2-year diploma course in BIOMEDICAL INSTRUMENTATION, Swinburne, College of Technology.

AUS 6 CHEMISTRY

Postgraduate — Courses (master's degree unless otherwise indicated) at the following: CHEMISTRY, Deakin University, New South Wales University, South Australia Institute of Technology, Western Australian Institute of Technology. ANALYTICAL CHEMISTRY, Royal Melbourne Institute of Technology (diploma). CHEMICAL ANALYSIS, Queensland Institute of Technology (diploma). CHEMICAL TECHNOLOGY, New South Wales University. FOOD AND DRUG ANALYSIS, New South Wales University, (diploma). PhD at Murdoch University (by research), New South Wales University.

AUS 7 CLINICAL SCIENCES

Postgraduate — Master's degree in CLINICAL SCIENCES available to graduates in medicine and surgery who have qualified for diploma in clinical sciences, Adelaide University (1 year); 1-year diploma course at Riverina College of Advanced Education.

AUS 8 COMMUNICATION DISORDERS
(see also Laryngology & Otology)

Postgraduate — Courses (master's degree unless otherwise stated) at the following: AUDIOLOGY, Macquarie University, Melbourne University (diploma, 1 year). SPEECH PATHOLOGY (2 years), Cumberland College. SPEECH THERAPY (1 year) by research and thesis, also PhD by thesis, Queensland University.

AUS 9 DENTISTRY

Postgraduate — Courses (for master's degree unless otherwise indicated) at the following universities: DENTAL SCIENCE, Adelaide, Melbourne (2 years), Queensland (2 years), Sydney, Western Australia. DENTAL SURGERY, Adelaide, Sydney. PUBLIC HEALTH DENTISTRY (1-year diploma), Sydney. PhD and D Dental Sc at universities of Adelaide, Melbourne, Queensland, Sydney, Western Australia.

AUS 10 DERMATOLOGY

Postgraduate — Diploma course in DERMATOLOGICAL MEDICINE, University of Sydney, for candidates of 3 years standing after registration as a medical practitioner.

Professional — Training in DERMATOLOGY is available through a prescribed postgraduate training course and examinations, leading to a Fellowship by the Australian College of Dermatologists (see AUS 49).

AUS 11 DIETETICS & NUTRITION

Postgraduate — One-year postgraduate courses are available as follows: DIETETICS, Deakin University, Western Australian Institute of Technology; NUTRITION AND DIETETICS, Flinders University, Gordon Institute of Technology Geelong, Queensland Institute of Technology, Sydney University. MSc (Nutrition), and PhD (Nutrition) at Deakin University.

AUS 12 ENDOCRINOLOGY

Professional — Following the basic medical qualification, the first stage of the specialist physician training is carried out for a minimum of 2 years, after which the Part I exam for the Fellowship of the Royal Australian College of Physicians (see AUS 59) is taken. On successful completion of the second stage - 3 years advanced training, including if possible 1-year's laboratory medicine and 1 year in overseas practice - the candidate may apply for the Fellowship.

AUS 13 EPIDEMIOLOGY

Postgraduate — Currently there are no specifically designed postgraduate courses in epidemiology but a number of universities offer higher degree courses to medical practitioners who are required to write a thesis based on EPIDEMIOLOGY.

AUS 14 FOOD SERVICES AND TECHNOLOGY

Postgraduate — Postgraduate diploma courses (1 year) are available as follows: FOOD SCIENCES, Hawkesbury Agricultural College; FOOD TECHNOLOGY, FOOD AND DRUG ANALYSIS, New South Wales University. FOOD TECHNOLOGY option in MAppSc (by coursework), New South Wales University. FOOD CHEMISTRY option in MSc and PhD, Deakin University.

AUS 15 GERIATRICS

Professional — The Royal Australasian College of Physicians (See AUS 59) recognizes a Fellowship in Geriatric Medicine, and there is a training course in GERIATRIC MEDICINE under its auspicies and those of the Australian Geriatrics Society (see AUS 54).

AUS 16 GYNAECOLOGY AND OBSTETRICS

Postgraduate

Postgraduate diploma in GYNAECOLOGY AND OBSTETRICS, Sydney University, for candidates of 3 years standing from registration as a medical practitioner. Master's degree, University of Melbourne for graduates of 2 years standing from first degree with 2 years as RMO before admission to Part I of exam.

The career association is the Royal College of Obstetricians and Gynaecologists, Australian Council, (see AUS 62) whose qualifications are obtained by undertaking a specified and supervised course (1 year basic and 3 years vocational training) in the accredited institution.

AUS 17 HAEMATOLOGY

Professional

Haematologists are required to hold qualifications in internal medicine provided by the Royal Australasian College of Physicians (see AUS 59), in pathology from the Royal College of Pathologists of Australia (see AUS 63), and in some instances both qualifications. A joint training programme providing both qualifications covers 6 years following registration as a medical practitioner. There are opportunities to develop specialities such as BLOOD TRANSFUSION, CANCER TREATMENT (ONCOLOGY), THROMBOSIS AND COAGULATION DISORDERS.

AUS 18 HEALTH ADMINISTRATION

Postgraduate

Postgraduate diploma course in HEALTH ADMINISTRATION, South Australian Institute of Technology. Master's degree in HEALTH ADMINISTRATION, by coursework and research (1 year), also PhD, New South Wales University.

Professional

Medical graduates may undertake a training programme for a Fellowship of the Australian College of Medical Administrators (see AUS 53) (by examination).

AUS 19 HEALTH STUDIES

Postgraduate

Postgraduate diploma courses (1 year): HEALTH EDUCATION, Kelvin Grove College of Advanced Education, Sydney Technical College. HEALTH SCIENCE, Western Australian Institute of Technology; HEALTH STUDIES, State College of Victoria, Toorak; INDUSTRIAL HYGIENE, Deakin University; REHABILITATION STUDIES, Lincoln Institute. Master's degree in HEALTH PERSONNEL EDUCATION, New South Wales University; also in HEALTH PLANNING.

AUS 20 IMMUNOLOGY

Postgraduate

Postgraduate diploma course (1 year) in IMMUNOLOGY, Monash University.

AUS 21 LARYNGOLOGY AND OTOLOGY
(see also Communication disorders)

Postgraduate

Postgraduate diploma course in LARYNGOLOGY AND OTOLOGY at Melbourne University for candidates of 2 years standing from registration as medical practitioner before entering for Part I. The career association

is the Otolaryngological Society of Australia.

There are no courses in OTORHINOLARYNGOLOGY as such. Graduates of Australian or New Zealand universities who wish to become an otorhinolaryngologist are required to satisfy postgraduate training requirements of the Royal Australian College of Surgeons (see AUS 61) at a Fellowship level. Overseas graduates in general are required to possess equivalent qualifications.

AUS 22 **MEDICAL TECHNOLOGY**

Postgraduate

Postgraduate diploma courses (1 year) are: CLINICAL SCIENCE, Riverina College of Advanced Education; MEDICAL TECHNOLOGY, South Australian Institute of Technology, Western Australian Institute of Technology. Two-year master's degree with RESEARCH option at South Australia Institute of Technology.

AUS 23 **MEDICINE AND SURGERY**
(see also under medical specialities such as Anaesthetics, etc.)

In the case of medicine in Australia there is only one 'basic' medical occupation, viz. general practice; the 'post-basic' medical occupations are known as the 'medical specialities'. Many general practitioners undertake a vocational training in general practice while some medical graduates with post-basic qualifications do not necessarily practise as specialists.

Postgraduate

Post-basic courses in general and specialist medicine are available at most of the universities which offer first degrees, and include: Adelaide: PhD (2-4 years), and Doctor of Medicine. Flinders: PhD (2-4 years from master's); MSc (1-2 years) by research or, in some areas such as CLINICAL LABORATORY SCIENCE by coursework and research; Doctor of Medicine. Melbourne: MSurg, PhD, Doctor of Medicine. Monash: Doctor of Medicine, PhD and MSurg. New South Wales: MSc, PhD, Doctor of Medicine by research. Queensland: DSurg, Doctor of Medicine. Sydney: MPublic Health (for med. or non-med. graduates) by thesis or coursework; MSurg, Doctor of Medicine, PhD. Tasmania: MSurg by thesis, PhD by thesis after advanced study and research, Doctor of Medicine by thesis after research and published work. Western Australia: MSurg, PhD, Doctor of Medicine.

The career association is the Australian Medical Association (see AUS 55) which has branches in all states.

AUS 24 **MICROBIOLOGY**

Postgraduate

One-year postgraduate diploma courses in MICROBIOLOGY are available at Monash University, Sydney University.

AUS 25 **NEPHROLOGY**

Professional

There are no specialist courses as such. To qualify as a specialist in NEPHROLOGY, the medical practitioner needs to obtain the Fellowship in RENAL MEDICINE of the Royal Australasian College of Physicians (see AUS 59) or an equivalent diploma. Three years of training in an approved post are necessary subsequent to satisfying the basic physician training requirements of the College.

AUS 26 NEUROLOGY

Professional

On completion of the pre-registration (intern) year, postgraduate training continues in the medical stream until the FRACP Part I is obtained. The candidate then undergoes a minimum three years' training in NEUROLOGY. The training programme is normally approved in advance by the Royal Australasian College of Physicians (see AUS 59) and credit towards the three-year programme of up to one year may be given for a research programme which is of relevance in training in CLINICAL NEUROLOGY.

AUS 27 NEUROSURGERY

Professional

To qualify as a neurosurgeon it is necessary to complete an approved training programme and possess a post-basic fellowship or similar qualification awarded by one of the Royal Colleges of Surgeons (see AUS 61).

AUS 28 NUCLEAR MEDICINE

Professional

NUCLEAR MEDICINE is recognized as a speciality within internal medicine by the Royal Australasian College of Physicians (AUS 59). Those wishing to become specialists in the subject must have acquired a minimum of two years' basic physician training and three years' advanced training in accordance with the requirements prescribed by the College.

AUS 29 NURSING

Post-registration

A variety of post-basic in-service courses is conducted by hospitals and health agencies. Most of these provide for study and experience in a specialist field of CLINICAL NURSING such as INTENSIVE CARE NURSING, THEATRE NURSING, nursing of patients with COMMUNICABLE DISEASES, CARDIOTHORACIC NURSING, COMMUNITY HEALTH NURSING etc. In addition the following courses are conducted by colleges of advanced education: COMMUNITY HEALTH NURSING, Canberra, Cumberland and Sturt; NURSE EDUCATION, Armidale, Cumberland, Newcastle, Queensland Institute of Technology; NURSING ADMINISTRATION, Armidale, Cumberland, Queensland Institute of Technology; NURSING AND UNIT MANAGEMENT, Queensland Institute of Technology. Courses are usually one year full-time or 2 years part-time.

There are two nursing colleges, whose objectives encompass not only the development of nursing education but the professional and welfare activities of nurses in Australia and overseas. These colleges are: The College of Nursing, Australia (see AUS 57) and New South Wales College of Nursing (see AUS 58).

AUS 30 OCCUPATIONAL HEALTH

Postgraduate

At present, the only course of study at postgraduate level for the INDUSTRIAL MEDICINE specialist is a 1-year diploma course in OCCUPATIONAL HEALTH, Sydney University. Steps are being taken to introduce a master's degree. The career association is the Australian and New Zealand Society of Occupational Medicine (see AUS 52).

AUS 31 OCCUPATIONAL THERAPY

Postgraduate — Courses available are: 1-year diploma in OCCUPATIONAL THERAPY, Cumberland College of Health Sciences; master's degree (1 year) and PhD (3 years from hons degree) at Queensland University.

AUS 32 OPHTHALMOLOGY

Postgraduate — Postgraduate diploma courses in OPHTHALMOLOGY are available at Melbourne University, Sydney University.

Professional — Membership of the Australian College of Ophthalmologists (see AUS 50) may be obtained by medical graduates after passing prescribed written and oral examinations. Diplomates of the above universities are granted exemptions from written examinations, though not clinical and oral. Modified conditions of entry apply similarly to applicants who possess accredited overseas qualifications in ophthalmology who meet the requirements of the college.

AUS 33 OPTOMETRY

Postgraduate — Courses available in OPTOMETRY are: Master's courses (1 year), and PhD, at Melbourne University (in conjunction with Victorian College of Optometry) and New South Wales University.

AUS 34 ORTHOPAEDICS

Professional — There are no postgraduate university courses as such. Fellowship training for the Royal Australasian College of Surgeons (see AUS 61) and for Australian Orthopaedic Association Membership (see AUS 56) is of not less than four years in ORTHOPAEDIC SURGERY at approved posts.

AUS 35 PAEDIATRICS

Professional — The appropriate qualification for recognition as a paediatrician is the Fellowship of the Royal College of Physicians (see AUS 59) in PAEDIATRICS, which is acquired by completing a basic training period in accredited hospitals, followed by a further 3-year advanced training.

AUS 36 PARASITOLOGY
(see also Immunology)

Postgraduate — Six-month postgraduate certificate course in MEDICAL PARASITOLOGY, Queensland University.

AUS 37 PATHOLOGY

Postgraduate — Postgraduate diploma course in CLINICAL PATHOLOGY, Sydney University, for graduates of 3 years standing from registration as medical practitioners.

Professional — A period of five years' certified supervised training in approved laboratories is required for admission to Fellowship of the Royal College of Pathologists of Australia (see AUS 63). Diplomates in clinical pathology (Australia, New Zealand or overseas) are not automatically eligible for Fellowship but may be exempted from part of the full examination requirements.

AUS 38 PHARMACOLOGY

Professional — There are departments of clinical pharmacology at a number of teaching hospitals in Australia. An advanced training programme in CLINICAL PHARMACOLOGY is organized by the Royal Australasian College of Physicians (see AUS 59), leading to the Fellowship of the College.

AUS 39 PHARMACY

Postgraduate — Courses are available at the following: master's degrees in PHARMACY (by research and thesis), and PHARMACEUTICAL STUDIES (by coursework); PhD (by thesis), Queensland University. Master's degree in applied science with PHARMACY or RESEARCH option (2 years), South Australian Institute of Technology. 1-year diplomas in HOSPITAL PHARMACY and INDUSTRIAL PHARMACY, and master's in PHARMACY, Sydney University. Master's degree in PHARMACY (by thesis after research), and PhD (by thesis), Tasmania University. 1-year diploma in HOSPITAL PHARMACY, and master's in PHARMACY (by coursework and thesis), Victorian College of Pharmacy. Diploma (by coursework) and master's in PHARMACY, Western Australian Institute of Technology.

AUS 40 PHYSIOTHERAPY

Postgraduate — Diploma course (1 year) available in PHYSIOTHERAPY, Cumberland College; MANIPULATIVE THERAPY, South Australian Institute of Technology. Master's degree in PHYSIOTHERAPY (1 year), and PhD, at Queensland University.

AUS 41 PLASTIC SURGERY

Professional — To qualify as a specialist in PLASTIC SURGERY a medical graduate must undergo 2 years basic surgical training to attain Part I of the exam; after a further 4 years training in advanced plastic surgery, those successful at Part II of the exam are admitted to the Fellowship of the Royal Australasian College of Surgeons (see AUS 61).

AUS 42 PSYCHOLOGICAL MEDICINE

Postgraduate — Postgraduate diploma courses are available at the following: PSYCHOTHERAPY, Adelaide University; PSYCHOLOGICAL MEDICINE, Melbourne University, Queensland University. Master's degree (by coursework and thesis), Monash University.

Professional — Members of the Australian and New Zealand College of Psychiatrists (see AUS 51) are required to complete a 5-year training programme in PSYCHIATRY in addition to basic medical training.

AUS 43 **PUBLIC HEALTH**

Postgraduate — Postgraduate diploma course, and master's degree by thesis or course-work (med. and non-med. graduates), Sydney University.

AUS 44 **RADIOLOGY**

Postgraduate — Diploma courses in DIAGNOSTIC RADIOLOGY and in THERAPEUTIC RADIOLOGY for graduates of 3 years standing from BMed and MSurg, Sydney University; Melbourne University.

Professional — The qualification for practice as a specialist in RADIODIAGNOSIS, RADIOTHERAPY and ONCOLOGY is Membership of the Royal Australasian College of Radiologists (see AUS 60). Medical graduates may train in this speciality after 1 year of post-registration experience. The course is of four years' duration.

AUS 45 **RHEUMATOLOGY**

Professional — General education in RHEUMATOLOGY at the postgraduate level is carried out under the auspicies of various organizations, in particular the Australian Postgraduate Federation in Medicine. Specialist training is supervised by the Royal Australasian College of Physicians (see AUS 59). The Fellowship of the RACP in the speciality of RHEUMATOLOGY is awarded after not less than three years' advanced training in RHEUMATOLOGY following completion of basic specialist physician training. Similar awards or qualifications from certain overseas postgraduate medical institutions are also acceptable in Australia.

AUS 46 **THORACIC MEDICINE/SURGERY**

Professional — The postgraduate education required for the qualification as a specialist in THORACIC MEDICINE or THORACIC SURGERY is based on the prescribed requirements by the Royal Australian College of Physicians (see AUS 59) and by the Royal Australian College of Surgeons (see AUS 61) at a fellowship level.

AUS 47 **TROPICAL MEDICINE**

Postgraduate — 1-year postgraduate diploma course in TROPICAL MEDICINE AND HYGIENE, Sydney University.

AUS 48 **UROLOGY**

Professional — To become a specialist in UROLOGY the medical practitioner is required to do postgraduate studies as prescribed by the Royal Australian College of Surgeons (see AUS 61).

SOME PROFESSIONAL AND CAREER ORGANIZATIONS

AUS 49 **AUSTRALIAN COLLEGE OF DERMATOLOGISTS**
271 Bridge Street, Glebe, NSW 2037.

AUS 50 **AUSTRALASIAN COLLEGE OF OPHTHALMOLOGISTS**
27 Commonwealth Street, Sydney, NSW 2010.

AUS 51 **AUSTRALIAN AND NEW ZEALAND COLLEGE OF PSYCHIATRISTS**
(Australian Medical Association), Maudaley House,
107 Rathdowne Street, Carlton, Vic. 3052.

AUS 52 **AUSTRALIAN AND NEW ZEALAND SOCIETY OF OCCUPATIONAL MEDICINE**
26 Koetong Parade, Mount Eliza, Vic. 3930.

AUS 53 **AUSTRALIAN COLLEGE OF MEDICAL ADMINISTRATORS**
AMA Building, 293 Royal Parade, Parkville, Vic. 3052.

AUS 54 **AUSTRALIAN GERIATRICS SOCIETY**
Medical Care Department, Extended Care Service,
Salvation House, 35 Outram Street, West Perth, WA 6005.

AUS 55 **AUSTRALIAN MEDICAL ASSOCIATION**
77-79 Arundel Street, Glebe, NSW 2037.

AUS 56 **AUSTRALIAN ORTHOPAEDIC ASSOCIATION**
139 Macquarie Street, Sydney, NSW 2000.

AUS 57 **COLLEGE OF NURSING, AUSTRALIA**
2-6 Arthur Street, Melbourne, Vic. 3004.

AUS 58 **NEW SOUTH WALES COLLEGE OF NURSING**
58 Allen Street, Glebe, NSW 2037.

AUS 59 **ROYAL AUSTRALASIAN COLLEGE OF PHYSICIANS**
145 Macquarie Street, Sydney, NSW 2000

AUS 60 **ROYAL AUSTRALASIAN COLLEGE OF RADIOLOGISTS**
45 Macquarie Street, Sydney, NSW 2000.

AUS 61 **ROYAL AUSTRALASIAN COLLEGE OF SURGEONS**
College of Surgeons Gardens, Spring Street, Melbourne, Vic 3000.

AUS 62 **ROYAL COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS**
(Australian Council), 8 La Trobe Street, Melbourne, Vic. 3000.

AUS 63 **ROYAL COLLEGE OF PATHOLOGISTS OF AUSTRALIA**
82 Windmill Street, Sydney, NSW 2000.

SOME SOURCES OF REFERENCE

Directory of Higher Education Courses, 1979.
Published for the Australian Department of Education by the Australian Government Publishing Service, Canberra 1978. Price A$3.30.

Handbook on Health Manpower Part I and Part II
Published for the Australian Department of Health by the Australian Government Publishing Service, Canberra.

Part I 1975 ISBW 0642 01040 4 - Unpriced
Part II 1977 ISBW 0642 02836 2 - Unpriced

The Bahamas

The Bahamas is an archipelago of islands and cays, some 15 of which have a significant number of inhabitants. The main concentration of population is on the island of New Providence, the other islands being referred to as Family Islands. Emphasis has previously been on curative health systems but recent emphasis has been directed towards improving primary health care both in New Providence and on the Family Islands. The Public Health Department of the Ministry of Health is the administrative unit.

Five clinics are situated on the Island of New Providence. These provide basic examination facilities but have no diagnostic facilities. There are five medical officers and the Principal Nursing Officer has responsibility for a team of community nurses. Senior nursing officers possess community health and/or health visitor qualifications.

At present approximately one-half of the child health sessions are still devoted to the care of the sick child. The other sessions provide developmental screening and immunization with special emphasis on infants and children under two years. Immunization is carried out by both government and private practitioners. Routine examinations of all children attending government schools is carried out.

In the Family Islands there are some 60 clinics. These offer basic examination facilities. One of the clinics has simple x-ray equipment. There are 17 medical officers, each major island having a resident government doctor. Nursing staff are based on all major islands. The smaller islands and cays are served by trained clinical nurses and midwives.

Health personnel on the Family Islands have the joint responsibility of supplying both preventive and curative treatment. The range of services is similar to that supplied on New Providence.

Sanitation, sewerage disposal and monitoring of environmental conditions are the responsibility of the Department of Environmental Health Services - a division within the Ministry of Health and National Insurance.

BAH 1 **BAHAMAS HOTEL TRAINING COLLEGE**

Enquiries — Health Course Coordinator, P.O. Box N4896, College Avenue, Oakesfield, Nassau, N.P. Tel: 809-32 35804.

Managing agency — Bahamas Hotel Training Council

General details — 1)Aug-Dec, Jan-May 2) 200 full-time, 500 part-time 3)None, but some help may be given to overseas students in renting accommodation locally 4)English 5)c.30 students are accepted annually from other countries, including Belize, Sweden, and West African and Caribbean countries.

Courses

** ENVIRONMENTAL HEALTH
2-year diploma course in environmental health and sanitary science, to provide basic training for food service workers in hotels and institutions.
No specific entry requirement usually, but knowledge of or experience in food supply industry desirable. (See Note).

** NUTRITION
2-year diploma course providing in-depth study of basic nutrition and its importance in the metabolic process, and in the commercial foods industries.
As for Environmental health course, above.

** PUBLIC HEALTH INSPECTION
18-month course of training for public health inspectors, under the auspices of the Royal Society of Health, and leading to diploma.
GCE 'O' level or equivalent, in English, maths or technical drawing, and a science subject, preferably physics.

Note — Candidates may be required to sit the College entrance examination.

BAH 2 — **COLLEGE OF THE BAHAMAS**

Enquiries — Registrar, College of the Bahamas, P.O. Box N4912, Nassau N.P.
Tel: (809-32) 36456/7

Managing agency — Ministry of Health jointly with College.

General details — 1)Sep-Dec, Jan-Apr, May-Jun 2) 13 3)None 4)English 5)No students from other countries have so far been accepted.

Courses

** MEDICAL TECHNOLOGY
3-year in-service diploma course in medical technology, for laboratory assistants already employed at the Medical Laboratory of the Princess Margaret Hospital, Nassau.
GCE 'O' level in 4 subjects, including maths, English, chemistry or general science, or equivalent qualification.

BAH 3 — **DEPARTMENT OF NURSING EDUCATION, PRINCESS MARGARET HOSPITAL**

Enquiries — Permanent Secretary, Ministry of Health & National Insurance, P.O. Box N3730, Nassau. Tel: 27425

General details — 1)Not known 2) 205 4)English 5) 5 students are accepted annually, from St Vincent, St Lucia, Montserrat, St Kitts.

Courses

* CLINICAL NURSING
18-month basic course for clinical nurse, leading to enrolment in Bahamas Nursing Council.
Bahamas Junior Certificate, age 17 years.

** PSYCHIATRIC NURSING
6-month course, leading to certificate in psychiatric nursing.
Enrolled clinical nurses.

** NURSING/MIDWIFERY
3-year basic course for registered nurse; this may be followed by further 1-year course in midwifery.
GCE 'O' level, age 17 years.

*** COMMUNITY NURSING
1-year post-basic course in community nursing, leading to certificate.
Registered nurses and registered midwives.

BAH 4 — There is also a 4-year apprenticeship/classroom type programme in ** PHARMACY at the Princess Margaret Hospital, which prepares students as dispensers in both government and private pharmacies, for which the entrance requirement is GCE 'O' level.

Bangladesh

In 1973 the Bangladesh Government decided to bring the primary health care facilities to the doorstep of the common man and the integrated Thana Health Complex Scheme was functionally started in 1974 with the integration of all vertical health projects. The scheme aims at providing primary health care services through Thana Health Complexes.

A new category of health worker known as the Family Welfare Worker (FWW) was created for delivery of domiciliary services. The FWW has been assigned a well-defined area of 4,000 population where he visits each and every house at monthly intervals and collects health information from the villages. During his domicilary visits he gives treatment for minor ailments as a first aid measure and refers serious cases to the nearest health centre. He also takes preventive measures against communicable diseases and disseminates information about environmental sanitation, food, nutrition, immunization, maternity and child welfare, and family planning.

To achieve community participation in the existing primary health care services, village voluntary health squads selected by the community at the rate of 1 per 500 population are being trained. These volunteers will be working under the technical guidance of the FWW concerned.

There is a Thana Health Complex with 31 bedded hospital (25 general and 6 maternity) and an out-patient department in each of the Thana headquarters, (average population of 200,000) and three sub-centres at the peripheral level of the Thana to treat the referral cases. A family planning clinic is also attached to the sub-centre. It is planned to establish one sub-centre in each Union (population 20,000) in the near future. By 1978, 170 Thana Health Complexes had been completed and the rest were under construction.

At each level there are qualified medical and paramedical staff to supervise the work of the unit concerned.

The Director of Health Services (Preventive) which is the sponsoring agency of the primary health care activities of the country, undertakes tours in the districts and divisions to assess and evaluate the primary health care activities. He is assisted by the Additional Director, the Director, the Assistant Directors, the National Epidemiologists and the training officers. Three independant assessment teams are also there to assess the activities of the districts and divisions. These assessment teams make recommendations for the improvement of the primary health care services.

BDE 1

BASIC NURSING TRAINING

There are five regular government schools of nursing with an admission capacity of 325. In addition there are 17 schools - 13 government and four private - conducting a crash programme with an admission capacity of 1,100. There are seven training institutions for family welfare workers with an admission capacity of 356.

Courses

** FAMILY WELFARE
18-month course for family welfare worker, including theoretical and practical work in midwifery, community health nursing and maternal and child welfare, with an emphasis on family planning.
Secondary school certificate

** NURSING
3-year course in general nursing, leading to the qualification of Registered Nurse.
Secondary school certificate. Health visitors who took the former 2¼-year health visitor course are eligible to enrol for a 2-year course for Registered Nurse.

*** MIDWIFERY
1-year course in midwifery leading to the qualification of Registered Midwife.
Registered nurses.

Note — There is also an 18-month programme on an apprenticeship scheme, for Junior Midwife, for service in maternal and child health and family planning centres and other health agencies.
See also BDE 4.

BDE 2 CHITTAGONG MEDICAL COLLEGE

Affiliated to the University of Chittagong

Enquiries — Principal, Chittagong Medical College, Chittagong. Tel: 202269, 200290.

Managing agency — Ministry of Health & Population Control

General details — 1)From Jul 2) 1300 3) 1013m & 297f 4)English & Bengali 5) 3 students are accepted annually from Malaysia

Relevant departments — Anatomy - Physiology - Pathology - Hygiene - Pharmacology - Medicine - Surgery - Orthopaedics - Obstetrics & gynaecology - Eye - ENT - Radiology - Radiotherapy - Anaesthesia - Paediatrics - BT centre - Physical therapy - Psychiatry - Dermatology - Dentistry - Tuberculosis

Courses

** PHARMACY
3-month certificate course in pharmacy, for drug shop owners or workers;
2-year diploma course in pharmacy, to provide pharmacists in hospitals and dispensaries.
Secondary School Certificate, with science for those taking diploma course. Minimum age 15 years.

** NURSING
3-year certificate course in nursing, leading to Senior Certificate in Nursing.
Secondary School Certificate, age 17-35 years.

*** MEDICINE
5-year course in medicine, leading to MBBS.
SSC with science, and HSC with science (pre-medical group).

BDE 3 CHOLERA RESEARCH LABORATORY

Enquiries — Scientific Director, Cholera Research Laboratory, GPO Box 128, Dacca 2.

General details — 1)Throughout year 2)Not fixed 3) 29 4)English and Bengali
5)Students have been accepted from a number of countries including: Egypt, Iran, Iraq, Indonesia, Jordan, Kuwait, Lebanon, Nepal, Pakistan, Saudi Arabia, Yemen and UK.

Courses

**** RESEARCH TECHNIQUES
There are no formal courses as such but the laboratory's Training Branch organizes research activities of 3 days to 2 months' duration in diarrheal diseases and related subjects.
Mainly degree candidates from other universities pursuing research for dissertation.

Note — The Laboratory is in the process of developing systematic courses, workshops and other training activities. It has provided a special course on clinical aspects, epidemiology and control of cholera for WHO for participants from the Eastern Mediterranean Region and the South-East Asia Region, as well as training for paramedical students from Bangladesh. Other training programmes are individually planned for each

research student. Other international workshops are planned. Laboratory facilities are available in Dacca and there are field stations in Matlab, Comilla and Teknaf in Chittagong.

The Laboratory operates under a bilateral project agreement between the governments of Bangladesh and the USA, and is financed also by the governments of the UK and Australia. Special project funds are provided by the International Development Research Centre of Canada, UNICEF, and the Ford Foundation. Joint research projects are undertaken with the Bangladesh Institute of Development Studies, the Johns Hopkins University International Center for Medical Research, Dacca, and the Bangladesh Fertility Research Project, Ministry of Health and Population Control, Government of Bangladesh.

BDE 4 **COLLEGE OF NURSING**

An accredited college of the University of Dacca

Enquiries: Principal, College of Nursing, Mohakhali, Dacca 12.

Managing agency: Ministry of Health & Population Control

General details: 1)From Sep 2) 220 3) 220f & 25m 4)English 5)Four overseas students are currently being considered.

Relevant departments: Nursing - Family health - Health education - Administration - Teaching

Courses:

*** NURSING
3-year course in nursing, leading to BNSc (Nursing).
Higher School Certificate. Candidates with Secondary School Certificate are accepted, but are required to follow a 5-year course to qualify.

*** NURSING/PUBLIC HEALTH
2-year postbasic nursing course leading to BNSc (Nursing) or BNSC (Public health).
Certificated nurses/midwives with minimum of 3 years experience in nursing service.

*** NURSING ADMINISTRATION/TEACHING
1-year postbasic diploma courses in nursing administration and nurse teaching.
Certificated nurses/midwives with minimum of 3 years experience in the nursing service.

*** FAMILY WELFARE
6-months for trainers training for family welfare visitors, leading to diploma.
Certificated nurse/midwife with 3 years experience, or certificated health visitors with five years experience.

*** WARD MANAGEMENT AND SUPERVISION
1-month certificate course in ward management and supervision.
Certificated nurses/midwives with 2-3 years experience in nursing services.

Note: The College is also programmed for 1-year specialization courses in psychiatry, paediatrics, orthopaedics, tuberculosis, cardiology and neurology, but these are not currently implemented due to shortage of specialist teachers.

The College receives support for activities in selected fields from international agencies, including the World Bank (IDA), SIDO, UNDP, UNICEF, WHO, UNFPA, UNESCO, UNSAID, Asia Foundation and the British Council.

BDE 5 **DACCA DENTAL COLLEGE**

A constituent college of the University of Dacca

Enquiries: Principal, Dacca Dental College, Ramna, Dacca. Tel: 246230

Managing agency: Director of Health Services

General details: 1)Jul-Jun 2) 50p.a. 3) 100m & 20f 4)English 5)Students from Iran, Palestine, Malaysia, Mauritius have been accepted: 5 p.a.

Courses:

** DENTAL TECHNOLOGY
2-year diploma course for dental technician (paramedical), to provide clinical and laboratory assistants for dental institutions and hospitals, and in the public dental health services.
Secondary School Certificate/matriculation

*** DENTAL SURGERY
4-year bachelor degree course in dental surgery (BDS of Dacca University), to provide staff for hospitals, public dental health services, and dental teaching.
Higher School Certificate (premedical), or dental technician with requisite qualification.

Note: Basic subjects are taught in the Dacca Medical College and Hospital. Consultancy and expert services are provided by WHO Technical Assistance and equipment is occasionally provided by international agencies.

BDE 6 **DACCA MEDICAL COLLEGE**

A constituent college of the University of Dacca

Enquiries: Principal, Dacca Medical College, Dacca. Tel: 243286, 242822, 254181-8 /120.

Managing agency: Ministry of Health & Director of Health Services

General details: 1)From Jul 2) 1695 3) 700m & 200f 4)English 5)Students from other countries are accepted for the MBBS course.

Relevant departments: Anatomy - Physiology - Pharmacology - Medical jurisprudence - Pathology - Community medicine - Medicine - Surgery - Obstetrics & gynaecology - Paediatrics - Ophthalmology - ENTD - Radiology - Radiotherapy - Dermatology

Courses:

** PHARMACY
2-year diploma course in pharmacy, to provide hospital staff.
Secondary school certificate with science, age 17-23 years.

** NURSING
4-year course for senior nursing certificate, to provide hospital staff.
Secondary school certificate, age 17-25 years

*** MEDICINE
5-year first degree course for bachelor of medicine and surgery.
Higher School Certificate in science (pre-med group) having at least 2nd division and 50% marks in aggregate. Age 17-23 years.

BDE 7 **INSTITUTE OF DISEASES OF THE CHEST & HOSPITAL**

A constitutent institute of the University of Dacca

Enquiries — Director, Institute of Diseases of the Chest & Hospital, Dacca-12. Tel: 300408, 303164, 300211.

Managing agency — Ministry of Health & Population Control (Health Division)

General details — 1)Jul-Jun 2) 12 per session 3) 12 4)English 5)No students have so far been accepted from other countries, but this is not ruled out.

Courses — **** TUBERCULOSIS & CHEST DISEASES
1-year diploma course in tuberculosis and chest diseases (DTCD).
MBBS with minimum 2 years' experience in tuberculosis/chest diseases and general medical work after graduation.

Note — The Institute is based on a hospital of 400 beds for tuberculosis patients and 100 beds for non-tubercular chest diseases, both medical and surgical. This is the only referral hospital for chest diseases and TB in Bangladesh, and functions under the faculty of postgraduate medical science and research of the University of Dacca, which has engaged in specialized training in TB and chest diseases since 1965.

BDE 8 **INSTITUTE OF EPIDEMIOLOGY AND DISEASES CONTROL RESEARCH**

Enquiries — Director, Institute of Epidemiology and Diseases Control Research, Dacca.

Managing agency — Ministry of Health & Population Control

General details — 2) 100

Courses — ** EPIDEMIOLOGY AND ENTOMOLOGY
3-month courses of pre-service and in-service training for epidemiologist, entomologist and entomology technicians.

BDE 9 **INSTITUTE OF POSTGRADUATE MEDICINE AND RESEARCH**

A constituent institution of the University of Dacca

Enquiries — Director, Institute of Postgraduate Medicine and Research, Dacca-2, Tel: 255194-98/1 or 245484; telegram: Postgraduate

Managing agency — Ministry of Health & Population Control

General details — 1)Jul & Jan (FCPS courses only) 2) 171 3) 80m & 20f 4)English 5)Ten students a year have been accepted from other countries, including Nepal, India, Pakistan, Burma, Malaysia, Indonesia, Singapore, and Thailand.

Relevant departments — Anatomy - Physiology - Pharmacology - Pathology - Microbiology - Biochemistry - Medicine - Paediatrics - Psychiatry - Surgery - Obstetrics & gynaecology - Ophthalmology - ENT - Cardiology - Neurology - Neuro-surgery - Nephrology - Physical medicine - Radiology - Radiotherapy - Anaesthesiology - Blood transfusion - Clinical pathology.

Courses — **** MASTER'S LEVEL
1½ years (Part I 6 months, Part II 1 year) for FCPS in medicine, surgery, paediatrics, obstetrics & gynaecology, ophthalmology, ENT, radiology and clinical pathology. 2 years for M.Phil (Medical) in anatomy, physiology, pharmacology, pathology, and biochemistry. years for MS (Orthopaedics).

**** VARIOUS
1-year postgraduate diploma courses in dermatology & venereology laryngology & otology, tropical medicine & hygiene, public health, ophthalmology, blood group serology & transfusion, tuberculosis & chest diseases, child health, anaesthesiology, gynaecology & obstetrics, orthopaedics, clinical pathology & community medicine. 2 years for medical radiodiagnosis/radiotherapy, and for psychological medicine.

BDE 10 INSTITUTE OF PUBLIC HEALTH, NUTRITION, DIETETICS AND FOOD SCIENCE

Enquiries: Director, Institute of Public Health, Nutrition, Dietetics and Food Science, Mohakhali Health Complex, Dacca.

Managing agency: Ministry of Health

General details: 1) 4 courses a year 2) 80 medical and 120 paramedical 3)None 4)English 5)No students from other countries have so far been accepted.

Courses:

*** NUTRITION
10-day courses leading to Certificate of Proficiency, to orient paramedics working in health centres about nutrition activities to be conducted as a component of primary health care services.
In-service for paramedical personnel.

**** NUTRITION
2-week courses, as described above, for qualified doctors working in health centres.

Note: The Institute is assisted in this task of nutrition orientation by WHO, UNICEF and UNDP. There are plans to develop an academic training course for public health nutrition.

BDE 11 MEDICAL ASSISTANT TRAINING SCHOOL BOGRA

Enquiries: Principal, Medical Assistant Training School, Bogra. Tel: 6333 (Hospital).

Managing agency: Ministry of Health & Population Control

General details: 1)Not known 2) 222 3)Some hostel accommodation available 4)Bengali and English 5)No students from other countries have so far been accepted.

Courses:

** MEDICAL ASSISTANT
2½-year diploma course for medical assistant, comprising 2 years of general study and a 6-month internship training.
Minimum secondary school certificate.

BDE 12 MEDICAL ASSISTANT TRAINING SCHOOL, KUSHTIA

Enquiries: Principal, Medical Assistant Training School, Kushtia, Dacca. Tel: 4131.
or:
Kushtia Project Director, Medical Assistant Training Programme, Dacca. Tel: Dacca 156615

Managing agency: Ministry of Health & Population Control

General details: 1)Jul-Jun 2) 165 3) 144m (female students may be accommodated in rented rooms) 4)English & Bengali 5)No students from other countries have so far been accepted.

Relevant departments: Anatomy & physiology - Pathology - Microbiology & parasitology - Pharmacology & therapeutics - Medicine - Surgery - Midwifery & gynaecology - Family planning - Community & preventive medicine.

Courses:

** MEDICAL ASSISTANT
2½-year course for medical assistant, to provide assistants to medical officers and to deliver primary health care to the community or at a health centre. Training covers the treatment of common ailments, screening more serious complaints for referral, immunization, disinfection and disinfestation, follow-up treatment of specialized cases, family planning, simple health education, nutrition.
Secondary School Certificate, age limit 22 years.

Note: There are also Medical Assistant Training Schools at Faridpur and Noakhali

BDE 13 MYMENSINGH MEDICAL COLLEGE

A constituent college of the University of Dacca

Enquiries: Principal, Mymensingh Medical College, Mymensingh. Tel: 2293 & 2101/76

Managing agency: Ministry of Health & Population Control

General details: 1)From Jul 2) 1321 3) 566m & 261f 4)English 5)Students from other countries have been accepted for the MBBS course

Relevant departments: Anatomy - Physiology - Pharmacology - Pathology - Community medicine - Surgery - Medicine - Jurisprudence - Obstetrics & gynaecology - Paediatrics - Eye - ENT - Radiology - Radiotherapy - Dermatology.

Courses:

** PHARMACY
2-year diploma course in pharmacy, to provide hospital staff.
Secondary School Certificate in science, age 17-23 years.

** NURSING
4-year course for senior nursing certificate.
Secondary School Certificate, age 17-23 years.

*** MEDICINE
5-year first degree course for bachelor of medicine and surgery.
Higher School Certificate in science (pre-med. group) having at least 2nd division and 50% marks in aggregate. Age 17-23 years.

BDE 14 NATIONAL INSTITUTE OF POPULATION CONTROL

Enquiries: Director, National Institute of Population Control, Dacca

Managing agency: Ministry of Health and Population Control

Courses:

** POPULATION CONTROL AND FAMILY PLANNING
The Institute conducts courses in population control and family planning for health service personnel.

BDE 15 **NATIONAL INSTITUTE OF PREVENTIVE AND SOCIAL MEDICINE**

Enquiries: Director, National Institute of Preventive and Social Medicine, Dacca

Managing agency: Ministry of Health & Population Control

General details: 2) 50

Courses:
**** PUBLIC HEALTH
1-year postgraduate courses for Diploma in Public Health, in tropical medicine, hygiene, community medicine, health education, nutrition, epidemiology, maternity and child health. (See Note).
Qualified doctors.

Note: The diploma courses are in process of transfer from the Institute of Postgraduate Medicine and Research.
The Institute also offers a 1-month orientation course in community medicine for THA. It proposes to offer in the future a 1-year course for Master of Public Health (MPH).

BDE 16 **PARAMEDICAL INSTITUTE, RAJSHAHI**

Enquiries: Principal, Paramedical Institute, Rajshahi. Tel: 3709 & 3869.

Managing agency: Ministry of Health & Population Control

General details: 1)Not known 2) 110 3) 112 4)English 5)No students from other countries have so far been accepted.

Courses:
** LABORATORY TECHNOLOGY
18-month diploma course for laboratory technician.
Secondary School Certificate (general, age up to 24 years)

** PHARMACY
2-year diploma course in pharmacy
Secondary School Certificate (science), age over 17 years.

** RADIOLOGY
18-month diploma course for radiology technician.
Secondary School Certificate (general), age up to 24 years.

** RADIO-THERAPY
2-year diploma course for radio-therapy technician.
Secondary School Certificate (general), age up to 24 years.

Note: There are plans to provide courses for dental technician, sanitary inspector, and blood transfusion technician, in the near future.
There is also a Paramedical Institute at Dacca

BDE 17 **REHABILITATION INSTITUTE AND HOSPITAL FOR THE DISABLED**

Enquiries: Director, Rehabilitation Institute and Hospital for the Disabled, Sher-E-Bangla Nagar, Dacca 7.

Managing agency: Ministry of Health & Population Control

General details: 1)Varies 2)c.54 3)Hostel under construction 4)English 5)None as yet, but there is no government ruling against it.

Relevant departments: Postgraduate medical education - Physical medicine - Nursing services

Courses

** BRACE AND LIMB MAKING
3-year certificate course for brace and limb makers
Higher School Certificate

***

*** ORTHOPAEDIC NURSING
1-year course in orthopaedic nursing, for graduate nurses.
Qualified registered nurses

**** ORTHOPAEDICS
2-year postgraduate diploma internship in orthopaedics; 2½-years for Master of Surgery (Orthopaedics) (see Note).
For postgraduate courses, MBBS; in addition, 4 years post MBBS experience required for master's course.

Note

With the help of international agencies and volunteer staff, the orthopaedic hospital was opened in 1972, mainly to care for victims of the war. The financial commitment was taken over by the Government of Bangladesh in July 1973, when postgraduate training programmes were also instituted. Prior to the starting of the course in orthopaedic surgery there were no fully trained orthopaedic surgeons in Bangladesh - only foreign volunteers. A new hospital is under construction, helped by donations towards construction and equipment from a large number of international agencies, including the Red Cross, World Council of Churches, USAID.

BDE 18 SCHOOL OF PHYSIOTHERAPY AND OCCUPATIONAL THERAPY

A constituent college of the University of Dacca

Enquiries

Vice Chairman, School of Physiotherapy and Occupational Therapy, R.I.H.D., Shamali, Dacca

General details

1)From Oct 2) 12 3) 6m 4)English 5)No students from other countries have so far been accepted

Courses

*** PHYSIOTHERAPY/OCCUPATIONAL THERAPY
3-year first degree courses in physiotherapy and in occupational therapy.
Higher School Certificate

Note

The School is situated within the Rehabilitation Institute & Hospital for the Disabled, Dacca (see BDE 17). Funds have been provided by voluntary organizations.

BDE 19 SYLHET MEDICAL COLLEGE

Affiliated to the University of Chittagong

Enquiries

Principal, Sylhet Medical College, Sylhet. Tel 6307.

Managing agency

Ministry of Health & Population Control

General details

1)From Jul 2) 275 3) 650m & 100f 4)English 5)Six students are accepted annually from overseas - no specific area.

Relevant departments

Anatomy Physiology - Pharmacology - Jurisprudence - Pathology - Community medicine - Medicine - Surgery - Midwifery - Ophthalmology - ENTD - Radiology - BTC - Paediatrics - Dermatology - Anaesthesiology

Courses

** PHARMACY
2-year course in pharmacy, to train qualified pharmacists
Secondary School Certificate, with science

*** MEDICINE
5-year first degree course for bachelor of medicine and surgery.
Higher School Certificate with science 2nd division (minimum).

BDE 20 **UNIVERSITY OF CHITTAGONG**

Enquiries: Registrar, University of Chittagong, University Post Office, Chittagong. Tel: 210131-34; telegram: Chittagong University

General details: 1)Aug-May in 2 terms 2) 19,617, including 16,673 in affiliated colleges 3) 1,225 4)English & Bengali 5)Students from other countries have been accepted

Relevant faculties: Medicine

Courses:
*** FIRST DEGREES
5 years for first degree in medicine and surgery

Note: Founded in 1966, this is a teaching university with 70 affiliated colleges, including Chittagong Medical College (see BDE 2) and Sylhet Medical College (see BDE 19).

BDE 21 **UNIVERSITY OF DACCA**

Enquiries: Registrar, University of Dacca, Ramna, Dacca. Tel: 255379, 255264, 255385; telegram: Dacca University

General details: 1)Jul-Jun in 3 terms 2)Over 66,000 including 38,000 in affiliated colleges (see Note) 3) 5,076 in university proper 4)English and Bengali 5)About 20 students from other countries are accepted annually, mainly from Malaysia and India

Relevant faculty: Medicine

Courses:
*** FIRST DEGREES
3-year honours degree courses in biochemistry, pharmacy and psychology.
5 years for first degree in medicine and surgery and in dentistry.
Higher School Certificate

**** HIGHER DEGREES
Master's level degree courses in most subjects. PhD requires 2 or 3 years, and DSc requires 3 years.

**** MEDICAL SCIENCES
1-year postgraduate diploma courses in chest and tuberculosis diseases, child health, clinical pathology, dermatology, ophthalmology, tropical medicine and hygiene; 2-year courses in laryngology, otology, radiodiagnosis and radiotherapy.

Note: This is a teaching university with 15 constituent and 150 affiliated colleges, including College of Nursing (BDE 4), Dacca Dental College (BDE 5), Dacca Medical College (BDE 6), Institute of Diseases of the Chest & Hospital (BDE 7), Institute of Postgraduate Medicine and Research (BDE 9), Mymensingh Medical College (BDE 13), School of Physiotherapy and Occupational Therapy (BDE 18).

BDE 22 **UNIVERSITY OF RAJSHAHI**

Enquiries — Registrar, University of Rajshahi, P.O. Rajshahi University, Rajshahi. Tel: 2441/9; telegram: University Rajshahi

General details — 1)Aug-May in 3 terms 2)c.56,000 including 49,000 in affiliated colleges 3) 3,150 in university proper 4)English and Bengali

Relevant faculty — Medicine

Courses — *** MEDICINE AND SURGERY
5-year first degree course in medicine and surgery for MB and BS.
Higher School Certificate

Note — Founded in 1953, this is a teaching university with 111 affiliated colleges, including Rajshahi Medical College and Rangpur Medical College.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Barbados

In Barbados primary care is provided at four different points within the health care system: private physicians; out-patient clinics for the aged and indigent; preventive out-patient clinics at health centres; and the casualty department of the Queen Elizabeth Hospital.

Government provides a free health care service to aged and indigent welfare patients based on the financial assessment of a welfare officer. District medical officers, who also practise as general practitioners, provide general medical care to these patients.

General medical care is provided mainly by private general medical practitioners, who serve patients on an indvidual basis. Although a few group practices exist, most physicians are sole practitioners who provide a comprehensive personal and 'whole patient' approach to the problems of individual patients and their families. These family physicians also provide basic medical services in all of the special fields of medicine. Of 40 private practices 68 per cent are located in the Bridgetown area and the remainder are scattered throughout the other 10 parishes.

Preventive services are provided at clinics in three health centres and two recently established multi-purpose clinics. All citizens of Barbados who require diagnosis of special medical problems check-ups following treatment for a specific problem, or immunization may attend the preventive health centre clinics.

The caualty department of the Queen Elizabeth Hospital, although intended only for emergency treatment, is used for provision of primary care by a considerable number of patients. (Over 60 per cent of patients are classified as non-emergency.) This is probably due to the increase in population over the last 10 years, the unavailability of general medical services at night and the absence of family doctors in rural areas. The hospital also provides a series of specialized out-patient clinics. Although designed to provide treatment for unique health problems, it appears that a significant number of patients are also receiving primary health care services from them.

At present there is no formal referral mechanism to ensure that patients are referred to secondary or tertiary care programmes when needed. The health care system is however being reviewed and measures will be taken to ensure the improvement and future development of the existing system.

BAR 1	**BARBADOS COMMUNITY COLLEGE**
Enquiries	The Registrar/Bursar, Barbados Community College, 'Eyrie', Howells Cross Road, St Michael. Tel: 63041
Managing agency	Ministry of Education, with PAHO/WHO
General details	1)Jan-Mar, May-Jul, Sep-Dec 2) 102 3)None 4)English 5) 15-30 students are accepted annually from other Commonwelath Caribbean countries.
Relevant departments	Division of Health Sciences
Courses	* FOOD SCIENCE 6-month course leading to College Certificate for Food Service Supervisor, to provide staff for hospital or government dietary departments. *Candidates ages 18-40 with some experience in a dietary department, and government recommendation.*

** DIETARY TECHNOLOGY
2-year course for college Dietetic Technician Certificate, to provide middle management hospital staff.
GCE 'O' level in English, maths, chemistry and two other subjects.

** PUBLIC HEALTH
2-year course for college Certificate in Public Health Inspection.
GCE 'O' level in English, maths, a science and two other subjects.

** OCCUPATIONAL THERAPY
1-year course leading to college certificate for Occupational Therapy Assistant, to provide assistants for registered O.T.s in hospitals.
GCE 'O' level in English and two other subjects, or Nursing Assistant's Certificate; some work experience.

** MEDICAL LABORATORY TECHNOLOGY
2-year course for college Certificate in Medical Laboratory Technology.
GCE 'O' level in five subjects including English, maths and two sciences.

** MEDICAL RECORD TECHNOLOGY
2-year course for college Medical Record Technician Certificate, to provide staff for hospitals or health centres.
GCE 'O' level in English, maths and three other subjects.

** PHARMACY
2½-year course for college Certificate in Pharmacy, to provide qualified dispensing pharmacists at certificate level.
GCE 'O' level or equivalents in English, maths, chemistry and two other subjects.

Note — An alternative entry qualification for all two-year programmes is the Barbados Community College Pre-Health Services Certificate, which is awarded after a 1-year programme in English, maths, physics, chemistry, biology and social studies.

BAR 2 NURSING TRAINING

The training of nurses in Barbados is being transferred in 1979 from The Tercentenary School of Nursing, Queen Elizabeth Hospital, to the Division of Health Sciences, Barbados Community College (see BAR 1).

Managing agency — Ministry of Health and National Insurance

Courses

* NURSING
2-year course for Enrolled Nurse, to provide nursing assistants.
Secondary school education, preferably with some GCE 'O' level subjects.

** NURSING
3-year course in general nursing, leading to certificate of Registered Nurse.
GCE 'O' level, age 18+.

** MENTAL NURSING
3-year course (at the Mental Hospital) for the qualification of Registered Mental Nurse.
GCE 'O' level, age 18+.

*** MIDWIFERY
1-year post-basic course in midwifery, leading to the qualification of Registered Midwife.
Registered nurses.

BAR 3 **REGIONAL ALLIED HEALTH PROJECT**

Enquiries — Project Manager, PAHO/WHO Regional Allied Health Project, P.O. Box 62OC, Bridgetown.

General details — 1)From Aug 4)English 5)These are regional Caribbean programmes and applications must be made through the regional Ministries of Health/Education.

Courses

**** HEALTH SCIENCES EDUCATION
lO-month course in health sciences education, with emphasis on teaching responsibilities for those concerned with the training of community health aides or other primary care workers at the auxiliary level, with in-service training programmes for other health staff, or with teaching in the initial preparatory programmes offered by schools of nursing, community colleges or other similar agencies.
As well as proficiency in basic communication skills candidates should have a technical or professional qualification in one of the health science disciplines, or a first degree or approved teaching qualification in one of the basic sciences, plus a minimum of 3 years' experience in the relevant field.

**** HEALTH SERVICES MANAGEMENT
lO-month course in health services management, with aims like those of the Health sciences education course, above.
As for Health sciences education course, above.

**** HEALTH SCIENCES EDUCATION
lO-month course in health sciences education, with emphasis on management responsibilities. The course is intended for those concerned with the supervision of CHAs or other primary care workers at the auxiliary level, with supervision of professional practice in the field, or with supervision/management of sections/departments/ divisions in Ministries of Health or at health institutions.
Candidates should be holders of UG health science tutors certificate, or UWI certificate in nursing education/nursing administration, or UWI diploma in community health, or any other approved relevant qualification.

**** HEALTH SERVICES MANAGEMENT
lO-month course in health services management, with aims like those of the Health sciences education course, above.
As for Health sciences education course, above.

Note — The four programmes described above are intended to provide further professional training and qualifications for nurses, public health inspectors/environmental health officers, laboratory technologists, pharmacists and other health professionals. A limited number of fellowships will be available for award by PAHO/WHO - applications should be made early through the relevant PAHO/WHO country representative. These are the 1979-80 programmes and subsequent programmes may differ.

BAR 4 **UNIVERSITY OF THE WEST INDIES - CAVE HILL CAMPUS**

Eqnuiries — Vice-Dean, University of the West Indies Faculty of Medicine, Queen Elizabeth Hospital, Martindales Road, St Michael.
Tel: 6O329; telegram: Genhos

Note — The Medical Faculty of the University of the West Indies is based on the Mona Campus .in Jamaica (see JAM 8). Training in the clinical years is shared between campuses in Jamaica, Barbados and Trinidad. In Barbados this takes place at the Queen Elizabeth Hospital.

The University plans to develop full medical training in the Eastern Caribbean under the Eastern Caribbean Medical Scheme.

Belize

Primary health care in Belize is delivered by the Ministry of Health through 10 urban health centres and 14 rural health centres located so that they serve the whole population. The services provided by the health centres include infant welfare clinics, pre-natal clinics, TB control, immunization, domiciliary midwifery services, communicable disease control, out-patients' services and assistance to chronically ill patients. School health services are also provided.

There are programmes covering water supply and sewage disposal, malaria eradication, port health services, food supply supervision and the control of rabies and VD.

BEL 1 **BELIZE SCHOOL OF NURSING**

Enquiries: Principal Nurse Tutor, Belize School of Nursing, Belize City.

Managing agency: Ministry of Health

Courses:

** NURSING
3-year certificate course in general nursing for Registered nurse.
Successful completion of pre-nursing course (see BEL 2)

*** MIDWIFERY
1-year certificate course for Registered midwife.
Registered nurse.

BEL 2 **BELIZE TECHNICAL COLLEGE**

Enquiries: Principal, Belize Technical College, P.O. Box 366, Belize City.

Managing agency: Ministry of Education

General details: 1)Sep-Dec, Jan-Apr, Apr-Jun 2) 550 full-time 3)None 4)English 5)At present 4 students are accepted annually from Turks and Caicos Islands.

Course:

* NURSING
2-year pre-nursing course to prepare recruits for the School of Nursing.
Complete Junior or Senior Secondary Certificate, age 16+.

Bermuda

Primary health care is provided by general practitioners in private practice, most of whom have their offices in Hamilton, but there are two doctors practising at the East end and two likewise at the West end of the Island. The Government provides medical services for babies, including immunization, and for school children up to the age of 16 years. Dental services are also provided for school children.

The general King Edward VII Memorial Hospital does not provide routine out-patient facilities except for the indigent, but of course does provide emergency services as well as a comprehensive range of in-patient services, with one or two exceptions.

BER 1

There are no training facilities for medical or paramedical personnel in Bermuda with the exception of sporadic courses for training of enrolled nurses which are held as the need arises at the hospital.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Botswana

In Botswana the emphasis in primary health care is on promoting and preserving the health of children. With the family unit still strong, education about the health of children or activities for promoting health have to be accepted by the whole family, with the elders having a lot of influence. With the advent of development, new problems are arising. The family unit tends to be weakened by migration to the towns where young able-bodied people go to seek jobs, and the older people are left in the traditional village home.

A community's first point of contact with the health service depends on its location. For people living in urban centres and large villages a state-registered or enrolled nurse in a clinic may be the first contact. The under-served are those living in remote areas in small scattered population groups. According to the 1971 census slightly more than half the population live in settlements of 500 people or less. In addition there are nomadic groups who hunt during the rainy season and settle near boreholes during the dry season; and there are lands and cattle-posts to which people migrate at certain times of the year - a small proportion living there permanently. Health service to these groups is by way of health posts.

A health post is either a two-roomed building to which a family welfare educator (FWE) is permanently attached, or simply a spot in a village at which the mobile health team stops periodically to render health services. There are currently about 200 health posts in the country and some 400 FWEs. This means that every village, whatever its size, has at least one FWE, and every community has the services of one. The envisaged coverage is for one FWE to serve 500-1000 of the population - a target of some 900-1000 FWEs. These primary health workers receive 11 weeks initial training in the basic elements of health education, child care, family planning, nutrition and environmental sanitation; but their great value is that of health education and motivation through close continuing contact with the community.

The health posts have clinics as the next level of health facility and the trained nursing staff at the clinic regularly visit the health posts.

Special mobile health services exist in the Ghanzi district where Masarwa live in small settlements of a few families employed by the farm owner. The health team visits them monthly or bi-monthly, providing a comprehensive health service. Mobile services are also rendered to remote areas where a health post has not been established - as far as the state of roads and reliability of vehicles permit.

Childhood infections are still rife although the picture has changed remarkably in the last ten years with the development of the immunization and vaccination programme. Botswana is due to be declared free of smallpox during 1979. Immunization and vaccination have always been free to people of all ages and since 1976 all health services (out-patient and in-patient) have been free to children under twelve.

Malnutrition and gastro-enteritis are of major public health importance and have a high incidence. Fortunately the foods that are traditional to Botswana have good food value and education against taboos and suitable preparation of these foods should improve the nutritional state. Future activity will continue to lay stress on better use of local foods with suitable preparation for children, and adequate amounts to give the required calorific value.

An attempt is being made to provide water to all inhabitants by the end of the next five years. Water is being drilled through boreholes and piped to villages so that the greatest distance from any household to a stand-pipe will be 400 metres. At the present time perhaps thirty per cent of children belong to homes that have access to this clean water. Similarly education about environmental sanitation with emphasis on disposal of human and household waste is being given high priority. A pilot project of construction of toilets suitable for those areas is being launched in two large villages in Kgatleng District and Southern District.

A separate problem in Botswana is that of peri-urban settlement. People flocked to these areas seeking work, and communities have arisen for which no adequate infra-structure of services had been planned. This has resulted in conditions of crowding, grossly inadequate housing, no sanitation facilities and often no stable income. Development of peri-urban areas has been commenced and provision of piped water and encouragement to build and use latrines is under way. Resettlement into better housing has been going on though often those who leave the shacks for alternative accommodation are replaced by newcomers into the area.

In Botswana education of the community about practices that promote better health is the foundation on which primary health care must be built; this is the priority area of the Ministry of Health. The long-term aim is to provide health for all by the year 2000 and protection by immunization for every child by the year 1990. Primary health care is an instrument which will be used to make these dreams a reality.

BOT 1 **BOTSWANA NATIONAL HEALTH INSTITUTE**

Enquiries: Principal Tutor, Botswana National Health Institute, P.O. Box 985, Gaborone. Tel: 2408, 2409.

Managing agency: Ministry of Health

General details: 1)Varies 2) 300 3) 176f & 20m 4)English 5) 5 students are accepted annually from Swaziland, Rhodesia, and South Africa.

Courses:

* HEALTH CARE
2 years for health assistants - clinical or sanitation, to train environmental health workers in aspects of community education and organization.
Junior Certificate (3 years secondary education).

* DENTAL CARE
3 years for dental therapist, to provide staff for health centres and hospitals.
Junior Certificate, with 1 year in health assistant - clinical course above.

* LABORATORY ASSISTANT
2 years for laboratory assistants, in the areas of disease detection and diagnosis, and curative and preventive care.
Junior Certificate.

* NURSING
2 years for enrolled nurse. This may be followed, after 2 years service, by further 2 years post-basic course for enrolled nurse midwife.
Junior Certificate for basic course.

* REHABILITATION
2 years for rehabilitation assistants, to train staff to provide physiotherapy and occupational therapy to patients.
Junior Certificate

** NURSING/MIDWIFERY
3 years for registered nurse, to provide general nursing care in hospitals, etc. This may be followed by further 1-year course for registered nurse/midwife.
Cambridge 'O' level or GCE, or enrolled nurse/midwife.

** PHARMACY
3 years for pharmacy technician, to man dispensaries in hospitals, health centres and clinics.
Cambridge 'O' level or good GCE

*** NURSE ANAESTHETIST
1-year post-basic course for nurse anaesthetist.
Cambridge 'O' level plus general nurse or nurse midwife qualification, and experience as a theatre nurse.

Note

The Institute also offers training facilities in its four enrolled nursing schools, in Lobatse, Serowe, Molepolole, and Francistown. Training facilities are currently being expanded and a building programme is under way. The target date for completion is the end of 1979 when it is hoped the enrolment will be increased to 400 in Gaborone with a further 300 in the enrolled nursing schools.

The Institute has links with the University of Botswana, and receives support from WHO, UNDP, UNICEF, Peace Corps, CUSO, OSAS and USAID.

BOT 2 **UNIVERSITY COLLEGE OF BOTSWANA**

A constituent college of the University of Botswana and Swaziland.

Enquiries

Dean of the Faculty of Education, University of Botswana and Swaziland, University College of Botswana, Private Bag 0022, Gaborone. Tel: Gaborone 3181; telex 429 BD.

General details

1)Aug-Dec, Jan-May 2) 8 3) 8f 4)English 5)No students from other countries have so far been accepted.

Relevant departments

Courses are taught by departments of biology, educational foundations, and science education; and the National Health Institute.

Courses

*** NURSE EDUCATION
3-year BEd (Nursing) course, to train nurse tutors for training schools in Botswana.
Experienced registered nurses - these may be admitted into the second year of the BEd programme (normally 4 years).

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Britain

The term primary health care is used to mean the advice and care given to members of the public on health matters by multi-disciplinary professional teams responsible for providing a service at the first point of contact and continuing through the treatment, rehabilitation or terminal phases of illness when these take place in the community. It is a personal service to people in their own homes, at the doctor's surgery, in clinics, in health centres and in schools. Members of the various health care disciplines bring their own specific skills to the primary health services so that advice and care is available on all preventive and curative aspects of health. Primary health care is concerned with the health of the community at large and with that of individual families and people of all ages within the community.

The aims of primary health care are: the promotion of health in its broadest terms, through education, support and the encouragement of self-care; the prevention of ill-health by prophylaxis, early diagnosis, education and advice on the value of early contact with the primary health care services; the care, treatment and rehabilitation of those who are acutely or chronically ill; the referral of patients to specialist services where necessary, and the provision of continuing care following specialist treatment.

Emphasis is being given in Britain to the encouragement of the development of primary health care teams. The core primary health care team consists of a general practitioner, a health visitor, a district nurse, a midwife and possibly a social worker. They are supported by secretarial and receptionist staff. Ideally they would all work under the same roof but to date this is not universally possible. Experience has shown that where health visiting and district nursing staff have been attached to general practice and have developed co-operative patterns of working with each discipline providing its own specific skills, the quality of service to individual patients and to families has improved. It has been possible to develop preventive and educative services as well as meeting the clinical needs of the practice population. Communications between the various members of the primary health care team, and between primary health care services and other National Health Services and local authority and voluntary services have also been improved.

A corollary of the development of a core primary health care team is that they require adequate, and preferably purpose built, premises in which to work. Such premises may be health centres or accommodation owned by the general practitioners. It is the policy of the Health Departments that priority should be given to the establishment of health centres or other primary care premises in areas where inadequate accommodation is hampering the development of primary health care teams. Health Centres provide the physical environment in which teamwork can develop and, by bringing together in one building facilities for the provision of preventive, curative, and continuing care and health education, the health centre can become the focus for health services in the community. The Departments are particularly anxious to seek improvement in the provision and delivery of primary health care in inner city areas and deprived areas where there are known to be health problems.

Co-operation between the health team and the area based team of social workers is essentially part of community care. In order to achieve this co-operation certain social workers in area teams are sometimes designated to receive direct from general medical practitioners referral for social work help for patients. Increasingly, however, social workers are being appointed to work in health centres either part-time or full-time. The needs of patients whose social and health problems are inter-related can then be met and access to social services facilities made easier for patients at health centres.

Peripheral to the core primary health care team are a wide range of services. These are school health services, general and community dental services, pharmaceutical services, general ophthalmic services, chiropody, and the personal social services. In addition many consult consultants and specialists provide services outside hospitals.

As indicated above the health centre provides the base for the activities of the core primary health care team. Ante-natal and post-natal, pre-school and school health services and immunization and vaccination may be provided. In addition, health centres may provide facilities for health education, family planning, speech therapy, chiropody, assessment of hearing, ophthalmology, physiotherapy and remedial exercises, and community dental services, general dental, pharmaceutical and general opthalmic services, hospital outpatient services and supporting social work services may also be provided as well as teaching facilities and some group treatment services such as parentcraft, relaxation classes, mother and baby clubs and slimming clubs.

In 1978 there were 1,071 health centres in operation (905 in England and Wales, 105 in Scotland and 61 in Northern Ireland). A further 99 centres (78, 15 and 6) were under construction and 110 (97, 12 and 1) were planned to start construction in 1978/79.

In 1977 there were 5,372 general practitioners operating from health centres (4,443 in England and Wales, 629 in Scotland and 300 in Northern Ireland). The number of health visitors was 10,546 (9,001, 1,185 and 360); a ratio to population of 1:4704. The number of district nurses was 15,809 (13,736, 1,485 and 588); a ratio to population of 1:3230.

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GBR 1 **ANAESTHETICS**

Postgraduate

No full-time courses at universities, but short or part-time courses of varying lengths for Primary and/or Final FFARCS are provided by several of the universities named below. Further information is given in 'Summary of Postgraduate Diplomas and Courses in Medicine', (see GBR 56). The diploma in ANAESTHETICS is awarded by the Examining Board in England of the Royal College of Physicians of London and the Royal College of Surgeons of England (see GBR 72).

The Faculty of Anaesthetics of the Royal College of Surgeons of England confers a Fellowship (FFA) by examination. For advice on training (including 3-week courses), apply to the Postgraduate Adviser. For courses for Primary FFA see Anatomy. Particular of both examinations may be obtained from the Secretary of the Examining Board in England (see GBR 59).

Research

At the universities of Belfast, Birmingham, Cambridge, Dundee, Edinburgh, Glasgow, Leeds, Liverpool, London (most of the Medical Schools), Manchester, Newcastle upon Tyne, Nottingham, Oxford, Salford (Postgraduate Medical Institute), Sheffield, Southampton and Wales.

GBR 2 **ANATOMY**

Postgraduate

Revision courses (full-time) in the basic medical sciences, including ANATOMY (suitable for one or more of: Primary FRCS, Primary FFA, Primary FDS, MRCOG Part I), are organized by the Edinburgh Postgraduate Board for Medicine (see GBR 58) (16 weeks) and the University of London Institute of Basic Medical Sciences (see GBR 77) (including 12 weeks for Primary FRCS, 8 weeks for Primary FDS). Similar courses, but on a part-time/day release basis, are offered by several universities; further information is given in 'Summary of Postgraduate Diplomas and Courses in Medicine' (see GBR 56).

Research

At the universities of Aberdeen, Belfast, Birmingham, Bristol, Cambridge, Dundee, Glasgow, Leicester, Liverpool, London (British Postgraduate Medical Federation, University College and various Medical Schools), Manchester, Newcastle upon Tyne, Nottingham, St. Andrews, Sheffield, Southampton and Wales (Cardiff University College).

GBR 3 **BACTERIOLOGY**
See also Microbiology

Postgraduate

Courses (1 year and for MSc, unless otherwise indicated) at the following universities: BACTERIOLOGY, London (School of Hygiene and Tropical Medicine, diploma) and Manchester (diploma). BACTERIOLOGY AND VIROLOGY, Manchester (1-2 years full-time, 2 years part-time). IMMUNOBIOLOGY, Aberdeen. IMMUNOLOGY, Birmingham. VIROLOGY, Reading (12 months).

Research

At the universities of Aberdeen, Birmingham, Bristol, Cambridge, Dundee, Edinburgh, Glasgow (including IMMUNOLOGY, VIROLOGY), London (St. Bartholomew's), St Mary's and St Thomas's Hospital Medical Schools, and Chelsea College), Manchester, Newcastle upon Tyne, Reading (VIROLOGY), Sheffield (MEDICAL MICROBIOLOGY), Southampton, Surrey and Warwick (VIRUS RESEARCH).

GBR 4 **BIOCHEMISTRY**

Postgraduate

Courses (1 year and for master's degree, unless otherwise indicated) at the following universities: BIOCHEMICAL PHARMACOLOGY, Southampton.

BIOCHEMISTRY, Cambridge, London (1 year full-time or 2 years part-time for MSc or College diploma at Chelsea College, 1 or 2 years at University College, also 1 year for diploma in General Biochemistry at St Bartholomew's Hospital Medical College) Wales (Aberystwyth University College) and York (12 months). BIOCHEMISTRY OF REPRODUCTION, Strathclyde. CHEMICAL MICROBIOLOGY, Cambridge (certificate of post-graduate study). CLINICAL BIOCHEMISTRY, Birmingham (2 years - entry in 1978, and in alternate years thereafter), Newcastle upon Tyne and Surrey (full-time study for 3 separate terms in 2 calendar years alternating with collaborative study in an approved clinical laboratory). STEROID ENDOCRINOLOGY, Leeds (12 months). TOXICOLOGY, Surrey (12 months).

Professional — Students may follow full-time courses in BIOCHEMISTRY leading to membership of the Institute of Biology at the following colleges: North East Surrey CT. Manchester P. Paisley CT. Trent P. Enquiries to the head of the department at the college concerned. Part-time courses are also available and a list of full-time and part-time courses may be obtained from the Institute of Biology (see GBR 61).

The Royal College of Physicians (see GBR 66), The Royal Institute of Chemistry (see GBR 73), the Royal College of Pathologists (see GBR 65) and the Association of Clinical Biochemists (see GBR 48) award a joint qualification Mastership in CLINICAL BIOCHEMISTRY (details from the Royal Institute of Chemistry). Membership of the Royal College of Pathologists is available in CHEMICAL PATHOLOGY (see Pathology - GBR 34).

Research — At above universities. East Anglia; also at ARC Food Research Institute which has been recognized by the university for purposes of postgraduate studies. London: Bedford, Chelsea, Imperial, King's, Queen Elizabeth, Queen Mary, Royal Holloway and University Colleges, and various Medical Schools. Oxford, Surrey. Also at Lanchester, Huddersfield, and North East London polytechnics.

GBR 5 **BIOLOGY**
See also Microbiology/and Radiobiology

Postgraduate — Courses (1 year and for master's degree, unless otherwise indicated) at the following universities: APPLIED PARASITOLOGY, Liverpool. BIOLOGICAL ANTHROPOLOGY, Durham. BIOLOGY OF WATER MANAGEMENT, Aston in Birmingham. COMPUTATION IN THE LIFE SCIENCES, York (12 months). DEVELOPMENT BIOLOGY, Aberdeen. ENVIRONMENTAL RESOURCES, Salford. HUMAN BIOLOGY, Loughborough U of Technology (MSc or associateship) and Oxford (diploma). IMMUNOBIOLOGY, Aberdeen. NEMATOLOGY, London (Imperial College, MSc and/or DIC). NEUROLOGY, London (Chelsea College). REPRODUCTIVE BIOLOGY, Manchester (normally 1 year). RESOURCE MANAGEMENT, Edinburgh (diploma 9 months, MSc 12 months). STEROID ENDOCRINOLOGY, Leeds (12 months).

Research — At most universities and Cranfield IT, East Anglia: also at ARC Food Research Institute and John Innes Institute, which are recognized by the university for purposes of postgraduate studies.

GBR 6 **BIOPHYSICS**
See also Radiobiology

Postgraduate — Courses (for MSc unless otherwise indicated) at the following universities: BIOENGINEERING AND BIOPHYSICS IN MEDICINE, Dundee (12 months). BIOPHYSICS AND BIOENGINEERING, London (2 years full-time or 3 years part-time at Chelsea College). BIOPHYSICS AND MEDICAL PHYSICS, Manchester (for MSc or diploma in Physics). MEDICAL BIOPHYSICS, London (1 year intercollegiate course at Guy's, Middlesex and St Mary's Hospital Medical Schools). RADIATION BIOPHYSICS, Dundee (1 year or 21 months). Also special introductory course in BIOPHYSICS at London (King's College).

Research — At the following universities: Cambridge, Dundee, East Anglia, Edinburgh, Leeds, London (Chelsea, Imperial, King's, Queen Elizabeth and University Colleges, and Institute of Cancer Research), Loughborough U of Technology, Manchester, St Andrews, Sussex and York; and at Cranfield IT and Polytechnic of Central London.

GBR 7 CANCER RESEARCH

Research — At most of the universities which award degrees in medicine. London: King's College, Middlesex and University College Hospital Medical Schools and Institute of Cancer Research, also at Bradford (CHEMOTHERAPY) and Brunel (RADIOSENSITISATION, BIOCHEMISTRY OF CELL INJURY), and at Royal Beatson Memorial Hospital, Glasgow. University of London Institute of Cancer Research (Royal Marsden Hospital) is concerned with all aspects of research into CAUSATION AND TREATMENT OF CANCER, training of research workers and advanced clinical teaching.

GBR 8 CARDIOLOGY

Postgraduate — Courses (full-time) for physicians in training as cardiologists and for general physicians at University of London Cardiothoracic Institute.

Research — At the universities of Belfast, Birmingham, Cambridge, Dundee, Edinburgh, Glasgow, Leeds, London (Guy's, King's College, St George's and University College Hospital Medical Schools, and Cardiothoracic Institute), Manchester, Newcastle upon Tyne, Nottingham, Oxford, St Andrews, Sheffield and Southampton.

GBR 9 CHEMISTRY

See also Biochemistry

Postgraduate — Courses (normally 1 year and for master's degree, unless otherwise indicated) at the following universities: CHEMICAL MICROBIOLOGY, see Microbiology. CHEMISTRY, Cambridge (certificate of postgraduate study), Glasgow 1 or 2 years full-time or 2 or 3 years part-time) and York. MEDICAL CHEMISTRY, Loughborough U of Technology (MSc or associateship), 1 year full-time or 3 years part-time). MICROBIOLOGICAL CHEMISTRY, Newcastle upon Tyne.

Research — At all universities.

GBR 10 CHEST DISEASES

including Tuberculosis

Postgraduate — Diploma courses (6 months) in TUBERCULOSIS AND CHEST DISEASES at University of Wales (Welsh National School of Medicine). Information about short courses at University of London Cardiothoracic Institute and elsewhere is given in 'Summary of Postgraduate Diplomas and Courses in Medicine' (see GBR 56).

Research — At the universities of Belfast, Birmingham, Cambridge, Dundee, Edinburgh, Glasgow, Leeds, Liverpool, London (King's and University College Hospital Medical Schools, and Cardiothoracic Institute), Manchester, Newcastle upon Tyne, Nottingham, Oxford, Southampton and Wales (Welsh National School of Medicine).

GBR 11 **DENTISTRY**

Postgraduate

The degree of Master of Dental Surgery (MDS) is awarded by all universities granting a first degree, except Leeds and Wales, each of which awards a degree of Master of Dental Science, and Birmingham and Edinburgh. However, in general, only Bristol, Dundee, Leeds, Liverpool, Manchester, Newcastle upon Tyne and Wales permit graduates of other approved universities to become candidates for these degrees. At many of the universities offering first degree courses, suitably qualified graduates of other universities may undertake research in DENTISTRY for higher degrees.

Full-time postgraduate courses (1 year and for diploma, unless otherwise indicated) open to candidates with recognized qualifications in dentistry are offered by the following universities: CHILDREN'S DENTISTRY (PAEDODONTICS) and CONSERVATION DENTISTRY, London (Institute of Dental Surgery and Royal Dental Hospital School of Dental Surgery, MSc). DENTAL HEALTH, Birmingham. DENTAL RADIOLOGY, London (King's College Hospital Dental School, MSc). DENTAL SURGERY, London (Institute of Dental Surgery, 1 year and - with Royal College of Surgeons - 8-week courses suitable for Final FDS (see below), also 8-week revision courses suitable for Primary FDS at Institute of Basic Medical Sciences). EXPERIMENTAL ORAL PATHOLOGY, London (London Hospital Medical College, MSc). ORAL PATHOLOGY, London (Institute of Dental Surgery, MSc). ORTHONDONTICS, Glasgow (suitable for DDO - see below) and London (Institute of Dental Surgery and Royal Dental Hospital School of Dental Surgery, MSc). PERIODONTOLOGY, London (Guy's Hospital Medical School, Institute of Dental Surgery, Royal Dental Hospital School of Dental Surgery and University College Hospital Medical School, MSc). PROSTHETIC DENTISTRY, London (Guy's Hospital Medical School and Institute of Dental Surgery, MSc). PUBLIC/PUBLC HEALTH DENTISTRY, Dundee and London (London Hospital Medical College, Dental Public Health, for MSc, also Institute of Dental Surgery with other London Dental Schools for DDPH - see below).

The Royal College of Surgeons of England (see GBR 72) and of Edinburgh (see GBR 71) and the Royal College of Physicians of Glasgow (see GBR 67) each grant a fellowship in DENTAL SURGERY (FDS). In addition the Royal College of Surgeons of England awards a diploma in ORTHODONTICS (DOrth) and a diploma in DENTAL HEALTH (DDPH); and the Royal College of Physicians and Surgeons of Glasgow a diploma in DENTAL ORTHOPAEDICS (DDO).

GBR 12 **DERMATOLOGY**
See also Urology and Venereology

Postgraduate

Diploma course (1 year) at University of London Institute of Dermatology. Information about short/part-time courses is given in 'Summary of Post-graduate Diplomas and Courses in Medicine' (see GBR 56).

Research

At the universities of Dundee and London (Guy's Hospital Medical School and Institute of Dermatology).

GBR 13 **DIETETICS AND NUTRITION**
See also Food science and technology

Postgraduate

Courses (1 year unless otherwise indicated) at the following universities: DIETETICS, London (Queen Elizabeth College, diploma). HUMAN NUTRITION, London (School of Hygiene and Tropical Medicine) MSc minimum 15 months, School diploma 1 year). NUTRITION, Cambridge diploma) and London (Queen Elizabeth College, MSc or College diploma). Recognized diploma courses are also provided by the following colleges. They vary in length from 18 months to 4 years according to the student's qualification. Cardiff C Food Technology and Commerce (3-4 years). Leeds P (18 months and 3 years). Manchester P (2 years S). P of North

London (18 months). Queen's C (18 months). Queen Margeret C (4 years). Robert Gordon's IT (4 years). South Glamorgan IHE (3 years).

Professional — Degree courses of the following institutes are recognized by the British Dietetic Association and for State Registration by the Council for Professions Supplementary to Medicine (see GBR 57): London University (plus the postgraduate diploma in DIETETICS) and Surrey University, Leeds P and Robert Gordon's IT (if followed by 1 year's approved practical training).

Research — At universities of London (Queen Elizabeth College and School of Hygiene and Tropical Medicine) and Surrey.

GBR 14 — **ENGINEERING, MEDICAL**
See also Medical/Health Physics

Postgraduate — Courses (1 year and for MSc, unless otherwise indicated) at the following universities: APPLICATION OF ENGINEERING IN MEDICINE AND BIOLOGY, London (Imperial College, DIC). BIOENGINEERING, Strathclyde (1 or 2 years). BIOENGINEERING AND BIOPHYSICS IN MEDICINE, Dundee (12 months). BIOMECHANICS, Surrey (MSc minimum 12 months, diploma 1 academic year). BIO-MEDICAL ENGINEERING, Newcastle upon Tyne. BIOPHYSICS AND BIOENGINEERING, London (Chelsea College, 2 years full-time or 3 years part-time). MEDICAL ELECTRONICS, London (St Bartholomew's Hospital Medical College). MEDICAL ENGINEERING option in mechanical engineering courses at Manchester (Institute of Science and Technology).

Research — At the universities of Aberdeen, Birmingham, Glasgow, Liverpool (joint Faculty of Medicine/Faculty of Engineering Unit), London (Chelsea and Imperial Colleges and - BIOMEDICAL ENGINEERING - King's College Hospital Medical School), Manchester (Institute of Science and Technology), Oxford (including Orthopaedic Engineering Centre), Salford, Southampton, Strathclyde (Bioengineering Unit; facilities available to Unit students include National Centre for Training and Education in Prosthetics), Surrey (BIOMECHANICS), Sussex (BIOMEDICAL ENGINEERING) and Warwick (BIOENGINEERING); and North Staffordshire Polytechnic.

GBR 15 — **ENGINEERING, PUBLIC HEALTH AND MUNICIPAL**

Postgraduate — Courses in Public health engineering (1 year unless otherwise indicated) at the universities of Dundee (for diploma in CIVIL ENGINEERING), London (Imperial College, MSc and/or DIC), Newcastle upon Tyne (MSc, diploma or certificate) and Strathclyde (diploma 1 year, MSc 1 or 2 years).

Research — At the universities and colleges named above, and at Salford and Aston in Birmingham.

GBR 16 — **FOOD SCIENCE AND TECHNOLOGY**
See also Dietetics and Nutrition

Postgraduate — Courses (1 year and for MSc, unless otherwise indicated) at the following universities: FOOD AND MANAGEMENT SCIENCE, London (Queen Elizabeth College). FOOD ENGINEERING, Leeds (12 months). FOOD RESOURCES RELATED TO COMMUNITY DEVELOPMENT, London (Queen Elizabeth College, diploma). FOOD SCIENCE, Leeds (MSc 12 months, diploma 1 or 2 years) and Reading (12 months, options in General Food Science, DAIRY SCIENCE, PUBLIC HEALTH, ANALYSIS OF FOOD AND DRUGS). FOOD SCIENCE AND MICROBIOLOGY, Strathclyde (1 or 2 years). FOOD TECHNOLOGY, Reading (12 months, at National College of Food Technology, options in FOOD MICROBIOLOGY, FOOD QUALITY CONTROL, FOOD PROCESS ENGINEERING). MEAT SCIENCE, Bristol

(expected to begin 1978 or 1979) and Nottingham (12 months).

Research — At the following universities: Birmingham, Heriot-Watt, Leeds, London (Queen Elizabeth College), Loughborough U of Technology, Nottingham, Reading, Strathclyde and Surrey; also at Scottish Universities Research and Reactor Centre, East Kilbride.

GBR 17 GENETICS

Postgraduate — Courses (1 year and for MSc, unless otherwise indicated) at the following universities: APPLIED GENETICS, Birmingham. EPIGENETICS, Edinburgh (diploma). GENE TECHNOLOGY IN MICRO-ORGANISMS, Essex (12 months). GENETICS, Cambridge (certificate of postgraduate study) and Edibnurgh (diploma). HUMAN GENETICS, Edinburgh.

Research — At the following universities: Aberdeen, Birmingham, Cambridge, Dundee, Durham, East Anglia (also at John Innes Institute which is recognized by the university for purposes of postgraduate study), Edinburgh, Essex, Glasgow, Kent at Canterbury, Lancaster, Leicester, Liverpool, London (Queen Mary and University Colleges), Manchester, Newcastle upon Tyne, Nottingham, Oxford, Reading, Sheffield, Southampton, Stirling, Strathclyde, Sussex, New U of Ulster, Wales (Aberystwyth, Bangor, Cardiff and Swansea University Colleges) and York.

GBR 18 HOSPITAL AND HEALTH SERVICE ADMINSITRATION

Postgraduate — Courses (1 year and for diploma, unless otherwise indicated) at the following universities: HEALTH ADMINISTRATION, Hull (MSc, 12 months). HEALTH AND WELFARE SERVICES MANAGEMENT, Aston in Birmingham (option for MSc/diploma in Public Sector Management). HEALTH SERVICES ADMINISTRATION, Leeds. HEALTH SERVICES MANAGEMENT, Manchester (also 2 year course designed primarily for graduates who have been accepted for (non-university) 3-year training course for the Hospital Service). HEALTH SERVICE STUDIES, Leeds (MA, 12 months). Also, at Brunel, HEALTH option in MA course in Public and Social Administration; and, at Exeter, an area of specialization for MSc in Information Processing which involves study of the public sector of the economy including the National Health Service.

Professional — London: International Hospital Centre, course for senior hospital and health service administrators from overseas (3 months); Polytechnic of the South Bank, diploma course in HOSPITAL ADMINISTRATION for overseas students (2 years).

The Institute of Health Service Administrators (see GBR 62) awards a diploma by examination which is the generally accepted qualification in this profession in the National Health Service. For information apply to the Secretary.

Research — At the following universities: Brunel, Hull (Institute for Health Studies), Kent at Canterbury (Health Services Research Unit of Centre for Research in the Social Sciences) and Manchester.

GBR 19 LARYNGOLOGY AND OTOLOGY

Postgraduate — Basic science course (3 months, twice yearly) at University of London Institute of Laryngology and Otology, also clinical instruction throughout the year; information about short/part-time courses is given in 'Summary of Postgraduate Diplomas and Courses in Medicine' (see GBR 56). MSc courses (full-time) in AUDIOLOGY at universities of Manchester (CLINICAL AUDIOLOGY, 1 year, for registered medical practitioners,

qualified and experienced teachers of the deaf, etc.). Salford (modular course, to be completed in 1, 2 or exceptionally 3 years) and Southampton (12 months, also certificare, 6 months, in MEDICAL AUDIOLOGY).

Professional — A postgraduate diploma in LARYNGOLOGY AND OTOLOGY is awarded by the Examining Board in England of the Royal College of Physicians of London and the Royal College of Surgeons of England. Particulars from the Secretary of the Examining Board in England (see GBR 59).

Diplomas of Fellowship are awarded by the Royal College of Surgeons of England, the Royal College of Surgeons of Edinburgh (see GBR 71) and the Royal College of Physicians and Surgeons of Glasgow (see GBR 67), by examination, with OTOLARYNGOLOGY as a special subject.

Research — At the universities of Cambridge, Dundee, Glasgow, Liverpool (MChOtol), London (Institute of Laryngology and Otology), Manchester, Newcastle upon Tyne, Oxford and Wales (Welsh National School of Medicine).

GBR 20 MEDICAL/HEALTH PHYSICS

See also Engineering, Medical; and Radiology

Postgraduate — Courses (1 year and for MSc, unless otherwise indicated) at the follow following universities (candidates must be suitably, but not necessarily medically, qualified): BIOPHYSICS AND MEDICAL PHYSICS, Manchester (for MSc or diploma in Physics). CLINICAL MEASUREMENTS, London (St Bartholomew's Hospital Medical College). HEALTH PHYSICS, Salford (modular course). MEDICAL BIOPHYSICS, London (intercollegiate course at Guy's, Middlesex and St Mary's Hospital Medical Schools). MEDICAL ELECTRONICS, London (St Bartholomew's Hospital Medical College). MEDICAL PHYSICS, Aberdeen and Surrey (minimum 12 months full-time or 24 months collaboratively). RADIATION AND ENVIRONMENTAL PROTECTION, Surrey. RADIATION BIOLOGY, London (1 year full-time or 2 years part-time, jointly at Guy's, Middlesex, Royal Free and St Bartholomew's Hospital Medical Schools). RADIATION PHYSICS, London (1 year full-time or 2 years part-time, Middlesex and St Bartholomew's Hospital Medical Schools). RADIOLOGICAL HEALTH AND SAFETY, Salford.

Research — At the universities of Aberdeen, Dundee (MEDICAL BIOPHYSICS), Edinburgh, Exeter, Glasgow, Leeds, London, Newcastle upon Tyne and Surrey.

GBR 21 MEDICINE AND SURGERY

See also under special subjects such as Anaesthetics, Cardiology, etc.

Note — Medical Schools are at present meeting heavy demands from British students and consequently there can be only a limited number of vacancies for students from overseas.

The British Postgraduate Medical Federation, a School of the University of London, is responsible for the development of postgraduate medical education in the University. The Federation comprises 13 specialist Institutes associated with postgraduate teaching hospitals - (see under separate subjects, e.g. Cardiology). The Scottish Council for Postgraduate Medical Education (see GBR 75) has been set up to plan and correlate the facilities for postgraduate education in Scotland. Details of courses available in Scotland from the Council.

A National Advice Centre is administered by the Council for Post-graduate Medical Education in England and Wales (see GBR 56) and may be consulted on specific training problems.

Postgraduate — Postgraduate courses (full-time) in: GENERAL MEDICINE, universities of Edinburgh (18 weeks) and London (Royal Postgraduate Medical School, 10 weeks). GENERAL SURGERY, Edinburgh Postgraduate Board for Medicine (15 weeks) and University of London (St Thomas's Hospital Medical School, 8 weeks), also Royal College of Surgeons of Edinburgh (SURGICAL PATHOLOGY AND OPERATIVE SURGERY, 9 weeks). NUCLEAR MEDICINE, University

of London (Middlesex, Royal Free, St Thomas's and Royal Postgraduate Medical Schools and Institute of Cancer Research, 1 year for MSc). Shorter full-time courses, and/or part-time courses of varying lengths, are also provided by some of the universities offering first degrees in medicine and surgery and at Postgraduate Medical Institute of University of Exeter; fuller information is given in 'Summary of Postgraduate Diplomas and Courses in Medicine' (see GBR 56).

MEDICINE: Except in Birmingham, Bristol and Southampton the degree of MD (Nottingham, Oxford and Southampton: DM), which may be conferred by all those universities offering first degrees in medicine and surgery, is open only to the universities' own graduates in medicine and surgery (or in some cases, to suitably qualified graduates of other universities who hold teaching, research or hospital appointments in or near the university concerned). At Birmingham, Bristol and Southampton, graduates in medicine and surgery from other approved universities may qualify for the MD/DM by undertaking 2 years' approved research within the university. At most of the universities which offer first degree courses, suitably qualified graduates of other universities may undertake research in MEDICINE leading to PhD (Dundee, also MMSc; Sheffield, also MMedSci); also, in MEDICAL SCIENCES, at Bradford (facilities normally restricted to doctors living or working in the area).

SURGERY: Except at Bristol and Southampton the degree of ChM (Cambridge: MChir; London, Newcastle upon Tyne and Southampton: MS; Belfast, Oxford and Wales: MCh), which may be conferred by most of the universities offering first degrees in medicine and surgery, is open only to the universities' own graduates in medicine and surgery (or in some cases to suitably qualified graduates of other universities who hold teaching, research or hospital appointments in or near the university concerned). At Bristol and Southampton the conditions for graduates of other universities are similar to those for the MD/DM (see above). At Birmingham, Glasgow and Nottingham, which do not offer a separate degree of Master of Surgery, the degree of MD may be conferred for work relevant to either MEDICINE or SURGERY; but only at Birmingham - see also above - is this degree open (subject to certain requirements) to graduates of other universities.

Professional

The Royal College of Physicians of London and of Edinburgh and the Royal College of Physicians and Surgeons of Glasgow together award a Diploma of Membership (MRCP(UK)) by common examination. (The Fellowship of these bodies (FRCP) is conferred by election, not by examination). Particulars may be obtained from the Royal College of Physicians of London (see GBR 66), the Royal College of Physicians of Edinburgh (see GBR 68), and the Secretary of the Royal College of Physicians and Surgeons of Glasgow (see GBR 67).

The Royal College of Surgeons of England, the Royal College of Surgeons of Edinburgh and the Royal College of Physicians and Surgeons of Glasgow each grant a Fellowship (FRCSEng, FRCSEd, FRCSGlas) by examination. The examination consists of two parts. The first part deals with the basic medical sciences: APPLIED ANATOMY, APPLIED PHYSIOLOGY and PATHOLOGY (for courses, see under separate heading). The second part is in CLINICAL SURGERY. Regulations can be obtained from the Examining Board (see GBR 59) in England of the Royal College of Physicians of London and the Royal College of Surgeons of England (FRCSEng) (see GBR 72), the Royal College of Surgeons of Edinburgh (FRCSEd) (see GBR 71), and the Royal College of Physicians and Surgeons of Glasgow (FRCSGlas).

GBR 22 **MEDICINE, FORENSIC**
See also Pharmacy

Postgraduate

Provision for course (10 weeks) at University of Glasgow (may be held if sufficient number of applications received).

Professional — A diploma in MEDICAL JURISPRUDENCE is awarded by the Society of Apothecaries. The examination is in two parts of which Part II can be taken in CLINICAL MEDICINE or PATHOLOGY (see GBR 76).

Research — At the universities of Belfast, Dundee, Edinburgh, Glasgow, Liverpool and London (Guy's and St George's Hospital Medical Schools).

GBR 23 MICROBIOLOGY

See also Baceteriology

Postgraduate — Courses (1 year and for MSc, unless otherwise indicated) at the following universities: APPLIED MICROBIOLOGY, Heriot-Watt and Strathclyde (diploma). FOOD MICROBIOLOGY, Reading (option for MSc in Food Technology, 12 months). FOOD SCIENCE AND MICROBIOLOGY, Strathclyde (1 or 2 years). GENE TECHNOLOGY IN MICRO-ORGANISMS, Essex (12 months). MICROBIOLOGICAL CHEMISTRY, Newcastle upon Tyne.

Research — At the following universities: Aberdeen, Birmingham, Bradford, Bristol, Cambridge, Dundee, East Anglia, Edinburgh, Essex, Glasgow, Heriot-Watt (BIOCHEMICAL MICROBIOLOGY), Kent at Canterbury, Lancaster, Leeds, Liverpool, London (Bedford, Birbeck, Chelsea, Imperial, King's, Queen Elizabeth, Queen Mary and University Colleges, certain Medical Schools including King's, St Bartholomew's, St Mary's and St Thomas's, and London School of Hygiene and Tropical Medicine, also National Institute for Medical Research and Rothamsted Experimental Station), Loughborough U of Technology, Manchester, Newcastle upon Tyne, Nottingham, Oxford, Reading, Sheffield, Southampton, Stirling, Strathclyde, Surrey, Sussex, New U of Ulster, Wales (Aberystwyth, Cardiff and Swansea University Colleges), Warwick and York.

GBR 24 NEUROLOGY

See also Biology, and Physiology

Postgraduate — Courses (12 months and for MSc, unless otherwise indicated) at the following universities: NEUROCHEMISTRY, London (Institute of Neurology jointly with Institutes of Psychiatry and Ophthalmology). NEUROCOMMUNICATIONS, Birmingham (instruction in neurology in addition to neurochemistry, psychology and analytical methods). NEUROLOGICAL SCIENCE, London (University College, 12 months or 24 months). Also, at University of London Institute of Neurology, CLINICAL NEUROLOGY and the anatomy, physiology and pathology of the nervous system, some instruction in NEUROSURGERY, NEURORADIOLOGY and ELECTROENCEPHALOGRAPHY, clinical teaching throughout the year, and 10-week course in NEUROPHYSIOLOGY.

Research — At the universities of Aberdeen, Belfast, Birmingham, Cambridge, Dundee, Edinburgh, Glasgow, Keele (Department of Communication), Leeds, London (Institute of Neurology and King's College Hospital Medical School), Manchester, Newcastle upon Tyne, Oxford, Southampton and Wales (Welsh National School of Medicine).

GBR 25 NURSING

Post-registration — Courses for HEALTH VISITOR'S certificate (see also below) at universities of Bradford, Hull, Leeds, Southampton, Surrey and Wales (Welsh National School of Medicine), also - combined with BNurs course - Manchester. NURSE TEACHERS certificate courses at New U of Ulster (Institute of Continuing Education, certificate of competence for intending Nurse Tutors, 1 year) and Wales (Cardiff University College, Education (Further Education) for Nurse Tutors). NURSING courses at Manchester

(diploma in ADVANCED NURSING STUDIES, or MSc, 1 year for suitably experienced registered nurses - MSc candidates taking education elective may apply for registration as Nurse Tutors), London awards a nursing diploma - examination only. NURSING EDUCATION courses, Edinburgh (MSc or diploma). MSc/diploma course in public sector management (HEALTH AND WELFARE SERVICES MANAGEMENT option) at Aston in Birmingham is suitable for senior nursing officers seeking a managerial qualification.

Specialised Nursing courses include: COMMUNITY NURSING: Courses for national certificate in district nursing (4 months) and health visitor's certificate (1 year). Details from local Health Authority/Council for Education and Training of Health Visitors. MIDWIFERY: training (1 year) at hospitals approved by Central Midwives Boards or Northern Ireland Council for Nurses and Midwives. OPHTHALMIC NURSING: (9 months) for advanced nursing diploma. ORTHOPAEDIC NURSING: (1 year) for certificate of Joint Examination Board of the British Orthopaedic Association and Central Council for the Disabled. THORACIC NURSING: for certificate of the British Thoracic and Tuberculosis Association. OCCUPATIONAL HEALTH NURSING: courses in 12 centres throughout the United Kingdom in preparation for the Royal College of Nursing Occupational Health Nursing Certificate.

Post-basic CLINICAL NURSING studies: training in many clinical specialities for nationally recognized certificate of Joint Board of Clinical Nursing Studies (Scotland: Committee for Clinical Nursing Studies) and Northern Ireland Council for Nurses and Midwives at centres approved by these bodies. NURSING MANAGEMENT AND EDUCATION courses: University of London Sister Tutor's diploma; Royal College of Nursing (2 years); Polytechnic of the South Bank (2 years). Clinical teacher's courses (RCN) (6 months unless otherwise states): Belfast CT, Birmingham P, Bristol P, Dundee CT (diploma, 1 year), Foresthill C (1 year), Glasgow CT (diploma, 1 year), Gwent CHE, Huddersfield P, Ipswich Civic C, Mabel Fletcher TC, Newcastle upon Tyne P, Queen Margaret C (diploma, 1 year), Royal College of Nursing, Sheffield P, Polytechnic of the South Bank. NURSE TEACHER'S course (62 weeks): Jordanhill CE. NURSE TUTOR'S course (1 year) leading to certificate in education: Bolton CE, Huddersfield P, Garnett C, Wolverhampton TTC.
Royal College of Nursing, certificate courses in ADVANCED NURSING ADMINISTRATION (1 year); CLINICAL TEACHING (6 months) (preparation for this certificate is undertaken by 12 other centres throughout the United Kingdom); COMMUNITY HEALTH NURSE TEACHING (1 year); international course for teachers of NURSING (1 year); OCCUPATIONAL HEALTH NURSE TEACHER'S course (1 year).

Research

At the universities of Edinburgh, Hull, London (Chelsea College: Nursing Education Research Unit), Manchester, Surrey and Wales (Welsh National School of Medicine).

Professional Organizations

BRITISH ORTHOPAEDIC ASSOCIATION
47, Lincoln's Inn Fields, London WC2A 3PN

BRITISH THORACIC AND TUBERCULOSIS ASSOCIATION
30, Britten Street, London SW3 6NN

CENTRAL COUNCIL FOR THE DISABLED
25, Mortimer Street, London W1N 8AB

CENTRAL MIDWIVES BOARD FOR ENGLAND AND WALES
39, Harrington Gardens, London SW7 4JY

CENTRAL MIDWIVES BOARD FOR SCOTLAND
24, Dublin Street, Edinburgh EH1 3PU

COMMITTEE FOR CLINICAL NURSING STUDIES
8, Forres Street, Edinburgh EH3 6BJ

COUNCIL FOR EDUCATION AND TRAINING OF HEALTH VISITORS
Clifton House, Euston Road, London NW1 2RS

GENERAL NURSING COUNCIL OF ENGLAND AND WALES
23, Portland Place, London W1 1BA

GENERAL NURSING COUNCIL FOR SCOTLAND
5 Darnaway Street, Edinburgh EH3 DP

JOINT BOARD FOR CLINICAL NURSING STUDIES
178-202 Great Portland Street, London W1N 5TB

NORTHERN IRELAND COUNCIL FOR NURSES AND MIDWIVES
216 Belmont Road, Belfast, BT4 2AT

PANEL OF ASSESSORS FOR DISTRICT NURSE TRAINING
Hannibal House, Elephant and Castle, London SE1 6TE

ROYAL COLLEGE OF NURSING OF THE UNITED KINGDOM
1a Henrietta Place, Cavendish Square, London W1M OAB

GBR 26 OBSTETRICS AND GYNAECOLOGY

Postgraduate — Information about the short and/or part-time courses provided by some universities (London: Institute of Obstetrics and Gynaecology) is given in 'Summary of Postgraduate Diplomas and courses in Medicine'.

Professional — The Royal College of Obstetricians and Gynaecologists awards a diploma in OBSTETRICS (DObst, RCOG) upon examination. The Membership of the College of Obstetricians and Gynaecologists (MRCOG) is by examination in two parts, Part I including basic sciences - for courses see Anatomy. Particulars of the regulations for both the diploma and Membership may be obtained from the Royal College of Obstetricians and Gynaecologists (see GBR 64).

Research — At the universities of Aberdeen, Belfast (including degree of MAO), Birmingham, Bristol, Cambridge, Dundee, Edinburgh, Glasgow, Liverpool, London (various Medical Schools and Institute of Obstetrics and Gynaecology), Manchester, Newcastle upon Tyne, Nottingham, Oxford, Sheffield, Southampton and Wales (Welsh National School of Medicine).

GBR 27 OCCUPATIONAL THERAPY

Postgraduate — University of Southampton awards an MSc (15 months) and a diploma (12 months) in REMEDIAL THERAPY.

Professional — A State Register of Occupational Therapists is maintained by the Council for Professions Supplementary to Medicine. The British Association of Occupational Therapists (see GBR 49) awards a diploma in OCCUPATIONAL THERAPY, recognized for State Registration. Courses of training are for three years.

GBR 28 OPHTHALMIC AND DISPENSING OPTICS

See also Orthoptics

Postgraduate — Courses (1 year and for MSc, unless otherwise indicated) at the following universities: APPLIED OPTICS, London (Imperial College, MSc and/or DIC). APPLIED AND MODERN OPTICS, Reading (12 months). METHODS OF OPHTHALMIC INVESTIGATION, Aston in Birmingham.

To qualify for registration with the General Optical Council a candidate must obtain the appropriate diploma of the British Optical Association, the Worshipful Company of Spectacle Makers, the Scottish Association of Opticians or the Association of Dispensing Opticians. This involves at least 1 year of practical work after taking the relevant degree or college course. Details may be obtained from the General Optical Council. (See GBR 60).

Research — At all the universities above, and Bradford, The City, Manchester (Institute of Science and Technology), and Wales (Institute of Science and Technology).

GBR 29 OPHTHALMOLOGY

Postgraduate — At the University of London (Institute of Ophthalmology, 4 months - clinical teaching throughout the year); also short courses, about which information is given in 'Summary of Postgraduate Diplomas and Courses in Medicine' (see GBR 56).

Profession — A postgraduate diploma (DO) is awarded by the Examining Board in England of the Royal College of Physicians of London and Royal College of Surgeons of England. Particulars from the Examining Board in England. (See GBR 59).

Diplomas of Fellowship are awarded by the Royal College of Surgeons of England, the Royal College of Surgeons of Edinburgh and the Royal College of Physicians and Surgeons of Glasgow by examination with OPHTHALMOLOGY as a special subject.

Research — At the universities of Birmingham, Cambridge, Dundee, Glasgow, Liverpool, London (Institute of Ophthalmology), Manchester (including Institute of Science and Technology), Newcastle upon Tyne and Oxford.

GBR 30 ORTHOPAEDICS

Postgraduate — At the universities of Liverpool (MChOrth, 12 months) and London (Institute of Orthopaedics, clinical teaching throughout the year; information about short/part-time courses is given in 'Summary of Postgraduate Diplomas and Courses in Medicine' (see GBR 56).

Research — At the universities of Birmingham, Cambridge, Dundee, Edinburgh, Glasgow, Liverpool, London (Institute of Orthopaedics), Manchester, Newcastle upon Tyne, Nottingham, Oxford, Sheffield, Southampton and Wales (Welsh National School of Medicine).

GBR 31 ORTHOPTICS

Professional — The British Orthoptic Council and Society awards a diploma (DBO) and an additional qualification (DBO(T)) to teachers of ORTHOPTICS. Full particulars may be obtained from the British Orthoptic Council (see GBR 51).

GBR 32 PAEDIATRICS

Postgraduate — At the following universities: PAEDIATRICS, London (Institute of Child Health, 8/9-week series of 1-week courses in special subjects) and Sheffield (3 months). TROPICAL CHILD HEALTH, Liverpool (diploma, 6 months for candidates with approved postgraduate experience and training). Information about short/part-time courses is given in 'Summary of Postgraduate Diplomas and Courses in Medicine' (see GBR 56).

Professional — Postgraduate diplomas in CHILD HEALTH (DCH) are awarded by the Examining Board in England of the Royal College of Physicians of London and Royal College College of Surgeons of England, and also by the Royal College of Physicians and Surgeons of Glasgow (see GBR 67). Particulars may be obtained from the Examining Board (see GBR 59) in England and

from the Royal College in Glasgow.

The clinical and oral sections of Part II of the MRCP (UK) (see Medicine and surgery) can be taken in PAEDIATRICS.

Research — At the universities of Aberdeen, Belfast, Birmingham (Institute of Child Health), Bristol, Cambridge, Dundee, Edinburgh, Glasgow, Liverpool, London (Guy's - Paediatric Research Unit - and King's and University College Hospital Medical Schools, and Institute of Child Health), Manchester, Newcastle upon Tyne, Nottingham, Oxford, Salford (Postgraduate Medical Institute), Sheffield, Southampton and Wales (Welsh National School of Medicine).

GBR 33 PARASITOLOGY

Postgraduate — Courses (1 year and for MSc, unless otherwise indicated) at the following universities: MEDICAL PARASITOLOGY, London (School of Hygiene and Tropical Medicine). NEMATOLOGY, London (Imperial College, MSc and/or DIC). PARASITOLOGY AND APPLIED BIOLOGY, Liverpool. Some courses included in curricula for diplomas in Public health (see GBR 41), also included in diploma courses in Tropical medicine and Hygiene at Liverpool and London (see GBR 46).

Research — At the universities of Birmingham, Cambridge, (Molteno Institute of Biology and Parasitology), Exeter, Glasgow (Wellcome Institute for Experimental Parasitology), Liverpool (School of Tropical Medicine and Hygiene), London (Imperial, King's and Queen Mary Colleges, and School of Hygiene and Tropical Medicine), Manchester, Wales (Bangor) and York.

GBR 34 PATHOLOGY

Postgraduate — Courses (1 year) at the following universities: CLINICAL PATHOLOGY, London (Royal Postgraduate Medical School, diploma). IMMUNOLOGY, Birmingham (MSc).

Revision courses (full-time) in the basic medical sciences, including PATHOLOGY (suitable for one or more of: Primary FRCS, Primary FFA, Primary FDS, MRCOG Part I), are organized by the Edinburgh Postgraduate Board for Medicine (see GBR 58) (16 weeks) and the University of London Institute of Basic Medical Sciences (see GBR 77) including 12 weeks for Primary FRCS, 8 weeks for Primary FDS). Information about part-time courses is given in 'Summary of Postgraduate Diplomas and Courses in Medicine' (see GBR 56).

Professional — The Royal College of Pathologists (see GBR 65) conducts examinations for its diploma (DRCPath) and for Membership (MRCPath). The Examining Board in England of the Royal College of Physicians of London and the Royal College of Surgeons of England awards a diploma in PATHOLOGY (DPath) of which details may be obtained from the Examining Board (see GBR 59).

Research — At the universities of Aberdeen, Belfast, Birmingham, Bristol, Cambridge, Dundee, Edinburgh, Glasgow, Leeds, Liverpool, London various Medical Schools and Institute of Basic Medical Sciences), Manchester, Newcastle upon Tyne, Nottingham, Oxford, Sheffield, Southampton and Wales (Welsh National School of Medicine).

GBR 35 PHARMACOLOGY

See also Pharmacy

Postgraduate — Courses (1 year and for master's degree, unless otherwise indicated)

at the following universities: BIOCHEMICAL PHARMACOLOGY, Southampton. BIOLOGY (PHARMACOLOGY) and CHEMICAL PHARMACOLOGY, Edinburgh, (diplomas). CLINICAL PHARMACOLOGY, Manchester (1-2 years full-time or 2 years part-time). EXPERIMENTAL PHARMACOLOGY, Bradford (minimum 12 months). PHARMACOLOGY, Cambridge, London (Chelsea College), Manchester (MSc or diploma, 1 or 2 years) and Strathclyde.

Reading offers MSc course (12 months) in FOOD SCIENCE with option in ANALYSIS OF FOOD AND DRUGS, and Wales (Institute of Science and Technology) MSc course (12 months) in PHARMACEUTICAL SCIENCES with option in APPLIED PHARMACOLOGY.

Research — At the universities of Aberdeen, Belfast, Birmingham (pre-clinical and clinical), Bradford, Bristol, Cambridge, Dundee, Edinburgh, Glasgow, Leeds, Liverpool, London (Chelsea, King's and University Colleges, School of Pharmacy, various Medical Schools and Institute of Basic Medical Sciences), Manchester, Newcastle upon Tyne, Nottingham, Oxford, Sheffield, Southampton, Strathclyde and Wales (Institute of Science and Technology and Welsh National School of Medicine). And at Portsmouth and Sunderland Polytechnics.

GBR 36 PHARMACY

See also Pharmacology

Postgraduate — Courses (1 year and for MSc, unless otherwise indicated) at the following universities: CLINICAL PHARMACY, Bradford (MPharm, 12 months full-time or 24 months part-time) and Strathclyde. FORENSIC SCIENCE, Strathclyde (12 months or 21 months) and Wales (Institute of Science and Technology, option for MSc in Pharmaceutical Sciences). HOSPITAL PHARMACY, Belfast and Heriot-Watt (1 year full-time or 2 years part-time). MEDICINAL CHEMISTRY, Loughborough U of Technology (MSc or associateship, 1 year full-time or 3 years part-time). PHARMACEUTICAL ANALYSIS, Strathclyde (12 months or 21 months) and Wales (Institute of Science and Technology, option for MSc in Pharmaceutical Sciences). PHARMACEUTICAL SCIENCES, Aston in Birmingham (2 years) and Wales (Institute of Science and Technology). PHARMACEUTICS (PHARMACEUTICAL TECHNOLOGY), London (Chelsea College, 1 year full-time or 2 years part-time, MSc/College diploma). PHARMACY (Hospital Pharmacy and Pharmaceutical Analysis), Manchester (MSc or diploma).

Professional — Graduates must complete 12 months' preregistration experience under the direct supervision of a pharmacist before they are eligible to apply to the Pharmaceutical Scoeity for registration to practise as pharmacists (see GBR 63).

Research — At the universities above (and some others which offer first degree courses); and at Brighton, Leicester, Liverpool, Portsmouth, and Sunderland polytechnics.

GBR 37 PHYSIOLOGY

Postgraduate — Courses (MSc) at University of London in NEUROBIOLOGY (Bedford and Chelsea Colleges, 1 year) and in PHYSIOLOGY (University College, 1 or 2 years, suitable for graduates in other sciences). Revision courses (full-time) in the basic medical sciences, including PHYSIOLOGY (suitable for one or more of: Primary FRCS, Primary FFA, Primary FDS, MRCOG Part I), are organized by Edinburgh Postgraduate Board for Medicine (16 weeks) and University of London Institute of Basic Medical Sciences (including 12 weeks for Primary FRCS, 8 weeks for Primary FDS). Similar courses, but on a part-time/day-release basis, are offered by several universities; further information is given in 'Summary of Postgraduate Diplomas and Courses in Medicine' (see GBR).

Research — At most of the universities which offer first degree courses (London, also Birkbeck College), and at Keele (NEUROPHYSIOLOGY AND SENSORY COMMUNICATION, Department of Communication) and Liverpool.

GBR 38 **PHYSIOTHERAPY**

Postgraduate — University of Southampton awards an MSc (15 months) and a diploma (12 months) in REMEDIAL THERAPY.

Professional — The Chartered Society of Physiotherapy awards by examination a certificate of Membership (MCSP) and a diploma for Teachers of Physiotherapy. Those who obtain the Society's qualification, after taking its examination, are eligible for registration with the Council for Professions Supplementary to Medicine, which maintains a State Register of physiotherapists.

Courses in PHYSIOTHERAPY (3 years) are available in a number of Schools of Physiotherapy recognized by the Chartered Society of Physiotherapy (see GBR 53). Applications for places should be made through the Physiotherapy Training Clearing House of the Chartered Society.

GBR 39 **PSYCHOLOGICAL MEDICINE (PSYCHIATRY)**
See also Psychology

Postgraduate — Full-time courses (for medically qualified candidates) at the following universities: PSYCHIATRY, London (Institute of Psychiatry, MPhil, also - see below - for MRCPsych and DPM); PSYCHOTHERAPY, Aberdeen (diploma, 1 year full-time or 20 months part-time) and Sheffield (diploma, 2 years full-time or 4 years part-time). Part-time and/or short courses, including courses for diploma in PSYCHOLOGICAL MEDICINE (DPM) and/or MRCPsych (see below), are offered by several universities: fuller information is given in 'Summary of Postgraduate Diplomas and Courses in Medicine' (see GBR).

Professional — The Royal College of Psychiatrists (see GBR 69) awards a diploma of Membership (MRCPsych) by examination. The Examining Board (see GBR 59) of the Royal College of Physicians of London and Royal College of Surgeons of England awards a diploma in PSYCHOLOGICAL MEDICINE (DPM).

Research — At the universities of Aberdeen, Belfast, Birmingham, Bristol, Cambridge, Dundee, Glasgow, Liverpool (including MPsyMed), London (Institute of Psychiatry), Manchester, Newcastle upon Tyne, Nottingham, Sheffield and Southampton.

GBR 40 **PSYCHOLOGY**
See also Psychological medicine

Postgraduate — Courses (1 year and for master's degree, unless otherwise indicated) at the following universities: ABNORMAL PSYCHOLOGY, Belfast (2 years), London (Institute of Psychiatry) and Oxford (2 years). APPLIED CHILD PSYCHOLOGY, Stirling (diploma, 2 years). APPLIED PSYCHOLOGY, Aston in Birmingham (also Applied Psychology for Engineers, each 12 months), Liverpool (diploma, 1 or 2 years, for graduates in Psychology or other suitably qualified and approved candidates) and Wales (Cardiff University College and - diploma 9 months, MSc 2 years - Institute of Science and Technology). CHILD PSYCHOLOGY, Birmingham (diploma in Psychology of Childhood, for graduates and other suitably qualified persons) and Nottingham. CLINICAL PSYCHOLOGY (2 years), Aberdeen, Birmingham, Edinburgh (24 months), Glasgow (for Honours graduates), Leeds (24 months), Liverpool (BPhil), London (Institute of Psychiatry), Newcastle upon Tyne and Surrey. ENVIRONMENTAL PSYCHOLOGY, Surrey (12 months). EXPERIMENTAL PSYCHOLOGY, Sussex. NEUROCOMMUNICATIONS,

Birmingham. OCCUPATIONAL PSYCHOLOGY, Belfast, Liverpool (BPhil, 2 years) and Sheffield. PSYCHOLOGY, Manchester (MSc or diploma), St Andrews (Philosophy and Psychology, diploma 1 year, MLitt 2 years) and Wales (Institute of Science and Technology, diploma). PSYCHOLOGY OF MENTAL HANDICAP, Keele.

Professional — The British Psychological Society (see GBR 52) awards a diploma in CLINICAL PSYCHOLOGY.

Research — At the above universities, also at City of London, Hatfield and North East London polytechnics.

GBR 41 — **PUBLIC AND INDUSTRIAL HEALTH**
See also Engineering, Public Health and Municipal

Postgraduate — Full-time courses (1 year unless otherwise indicated) leading to diploma in PUBLIC HEALTH (DPH), and normally open only to candidates holding a registrable medical qualification, at the universities of Bristol, Glasgow, Leeds and (if sufficient candidates available) Sheffield; part-time DPH courses also offered at several universities. Other postgraduate courses (1 year and for MSc, unless otherwise indicated) for candidates with an approved medical qualification: COMMUNITY MEDICINE, Edinburgh (diploma). INDUSTRIAL HEALTH, Dundee (diploma or certificate, 3 months), London (School of Hygiene and Tropical Medicine, 3 months for Conjoint Board diploma - see below) and Manchester (for Conjoint Board diploma - see below - 1 year full-time or equivalent part-time). OCCUPATIONAL MEDICINE or SOCIAL MEDICINE (2 years) or TROPICAL PUBLIC HEALTH, London (School of Hygiene and Tropical Medicine). TUBERCULOSIS AND CHEST DISEASES, Wales (Welsh National School of Medicine, diploma, 6 months).

Postgraduate courses (for MSc unless otherwise indicated) not necessarily restricted to medically qualified candidates: COMMUNITY HEALTH, Glasgow (MPhil, 2 years full-time or 3 years part-time, primarily for those without medical qualifications) and Liverpool (MCommH, 1 year). COMMUNITY MEDICINE, Nottingham (MMedSci, 2 years). INDUSTRIAL SAFETY, London (Imperial College, MSc and/or DIC). OCCUPATIONAL HYGIENE, London (School of Hygiene and Tropical Medicine) and Newcastle upon Tyne. OCCUPATIONAL SAFETY AND HYGIENE, Aston in Birmingham. PUBLIC HEALTH, Dundee (MPH, minimum 12 months) and Reading (option for MSc, 12 months, in Food Science). SAFETY AND HYGIENE, Aston in Birmingham (diploma, 6 months).

Professional — Postgrduate diplomas (for medical graduates) in INDUSTRIAL HEALTH are awarded by the Examining Board (see GBR 59) in England of the Royal College of Physicians of London and the Royal College of Surgeons of England (also one in PUBLIC HEALTH) by the Royal College of Physicians and Surgeons of Glasgow (see GBR 67), and by the Society of Apothecaries of London (see GBR 76). Particulars of these diplomas are available from the Secretary of the Examining Board in England. The Faculty of Community Medicine of the Royal College of Physicians of the UK (see GBR 66) awards a diploma of Membership by examination.

For non-medical graduates the British Examining Board in Occupational Hygiene (see GBR 50) awards a diploma of Professional Competence and a certificate of Operational Competence in COMPREHENSIVE OCCUPATIONAL HYGIENE. Details from the Secretary of the Board. Also the Royal Institute of Public Health and Hygiene (see GBR 74) provides courses including a diploma in ENVIRONMENTAL CONTROL (4 months).

Research — At the universities named above, also at others which award first degrees in medicine and at Kent at Canterbury (Health Services Research Unit of Centre for Research in the Social Sciences) and Surrey.

GBR 42 **RADIOBIOLOGY**
See also Medical/Health Physics

Postgraduate — Courses (for MSc) at the universities of Birmingham (55 weeks, primarily as preparation for PhD candidature) and London (1 year intercollegiate course in RADIATION BIOLOGY jointly at Guy's, Middlesex, Royal Free and St Bartholomew's Hospital Medical Schools, and in RADIATION PHYSICS jointly at Middlesex and St Bartholomew's Hospital Medical Schools).

Research — At the universities of Birmingham, Cambridge, London (Queen Mary College and St Bartholomew's Hospital Medical College), Manchester, Reading (National Institute for Research in Dairying, attached to the University, and at ARC Letcombe Laboratory, Wantage, an associated institution), Salford (Nuclear Science Building), Wales (Cardiff University College) and York.

GBR 43 **RADIOGRAPHY**
See also Radiology

Professional — The College of Radiographers awards certificates of qualification in both RADIOGRAPHY (R) and RADIOTHERAPY (T) by examination. Holders of a certificate are entitled to apply for membership of the Society. Training for each takes a minimum of two years. Students who have obtained one of the certificates and wish to sit for the second are required to spend one year studying in approved centres after obtaining the first. Training is available in a large number of hospitals. Details may be obtained from the College of Radiographers (see GBR 54).

Those who obtain the College's qualification after taking its examinations are eligible for registration with the Council for Professions Supplementary to Medicine (see GBR 57), which maintains a State Register of radiographers. The College also organizes (1) a higher examination for persons who have been eligible for State Registration in the United Kingdom for not less than four years; (2) examinations leading to the Teacher's Diploma; and (3)(a) diploma in NUCLEAR MEDICINE; (b) diploma in MEDICAL ULTRASOUND. Details of these examinations are obtainable from the College (see GBR 54).

GBR 44 **RADIOLOGY**

Note — In Britain the two specialities of RADIODIAGNOSIS and RADIOTHERAPY are quite separate. There are postgraduate courses in each, and post-graduate students cannot cover the study of both specialities in one course.

Postgraduate — Courses (2 years - in some cases 3rd year may be available for FRCR) leading to university diplomas at Aberdeen (in MEDICAL RADIODIAGNOSIS for registered medical practitioners of at least 1 year's standing) and Edinburgh (MEDICAL RADIODIAGNOSIS or MEDICAL RADIOTHERAPY), and to the diplomas of the Conjoint Board (see below) at the universities of Birmingham, Bristol, Glasgow, London (Schools of the university in co-operation with Royal College of Radiologists) and Manchester (2 years for DMRD, 3 years for FRCR).

Professional — The Examining Board (see GBR 59) in England of the Royal College of Physicians of London and the Royal College of Surgeons of England awards a postgraduate diploma in RADIODIAGNOSOS (2 years) and a postgraduate diploma in RADIOTHERAPY (2 years); particulars may be obtained from the Secretary of the Examining Board in England. The diploma of Fellowship (FRCR) is awarded by the Royal College of Radiologists (see GBR 70).

Research — RADIODIAGNOSIS and RADIOTHERAPY: at the universities of Belfast, Birmingham, Bristol, Cambridge, Dundee, Edinburgh, Glasgow, Leeds, Liverpool (MRad, open only to holders of Liverpool DMR(D) or DMR(T)),

London, Manchester, Newcastle upon Tyne, Nottingham, Sheffield and Wales (Welsh National School of Medicine).

GBR 45 **SPEECH THERAPY**

Postgraduate — MSc course (1 year full-time or 2 years part-time) in HUMAN COMMUNICATION at University of London (Guy's Hospital Medical School).

Professional — Licentiates of the College of Speech Therapists (see GBR 55) may proceed to membership (MCST) by examination and fellowship (FCST) by dissertation. Further information is available from the College.

Research — At the universities of Essex, Manchester and Reading.

GBR 46 **TROPICAL MEDICINE AND HYGIENE**

Postgraduate — Courses (1 year and for diploma, unless otherwise indicated) at the following universities: CLINICAL TROPICAL MEDICINE, London (School of Hygiene and Tropical Medicine, MSc). TROPICAL CHILD HEALTH, Liverpool (6 months for candidates with approved postgraduate experience and training). TROPICAL PUBLIC HEALTH, London (School of Hygiene and Tropical Medicine). TROPICAL MEDICINE AND HYGIENE, Liverpool (3 months) and London (5 months for Conjoint Board diploma - see below - in School of Hygiene and Tropical Medicine).

Professional — The Examining Board (see GBR 59) in England of the Royal College of Physicians of London and the Royal College of Surgeons of England awards a postgraduate diploma in TROPICAL MEDICINE AND HYGIENE. Particulars from the Secretary of the Examining Board in England.

Research — At the universities of Liverpool and London.

GBR 47 **UROLOGY AND VENEREOLOGY**

Postgraduate — Courses in SEXUALLY TRANSMITTED DISEASES (12 weeks) at University of London (British Postgraduate Medical Federation; also, at Institute of Urology, clinical teaching throughout the year) and in VENEREOLOGY (3 months, for diploma) at University of Liverpool.

Postgraduate diploma — The Society of Apothecaries of London (see GBR 76) awards a postgraduate diploma in VENEREOLOGY.

Research — UROLOGY: at the universities of Belfast, Cambridge, Edinburgh, Glasgow, Leeds, London (Institute of Urology and University College Hospital Medical School), Manchester, Newcastle upon Tyne, Oxford, Southampton and Wales (Welsh National School of Medicine). VENEREOLOGY: at the universities of Glasgow and London (Middlesex Hospital Medical School).

SOME NATIONAL AND PROFESSIONAL ORGANIZATIONS

GBR 48 **ASSOCIATION OF CLINICAL BIOCHEMISTS**
30, Russell Square, London WC1B 5DT

GBR 49 **BRITISH ASSOCIATION OF OCCUPATIONAL THERAPISTS**
20, Rede Place, Bayswater, London W2 4TU

GBR 50 **BRITISH EXAMINING BOARD IN OCCUPATIONAL HYGIENE**
Medical Department, Associated Octel Ltd.,
Ellesmere Port, Wirral, Merseyside L65 4HF

GBR 51 **BRITISH ORTHOPTIC COUNCIL AND SOCIETY**
Tavistock House North, Tavistock Square, London WC1H 9JB

GBR 52 **BRITISH PSYCHOLOGICAL SOCIETY**
St Andrews House, 48 Princess Road East, Leicester LE1 7DR

GBR 53 **CHARTERED SOCIETY OF PHYSIOTHERAPY**
14 Bedford Row, London WC1R 4ED

GBR 54 **COLLEGE OF RADIOGRAPHERS**
14 Upper Wimpole Street, London W1M 8BN

GBR 55 **COLLEGE OF SPEECH THERAPISTS**
Harold Poster House, 6 Lechmere Road, London NW2 5BU

GBR 56 **COUNCIL FOR POSTGRADUATE MEDICAL EDUCATION IN ENGLAND AND WALES**
7, Marylebone Road, Park Crescent, London NW1 5HA
(A useful source of additional information, 'Summary of Postgraduate Diplomas and Courses in Medicine', is published annually by the Council).

GBR 57 **COUNCIL FOR PROFESSIONS SUPPLEMENTARY TO MEDICINE**
York House, Westminster Bridge Road, London SE1 7UH

GBR 58 **EDINBURGH POSTGRADUATE BOARD FOR MEDICINE**
Hill Square, Edinburgh EH8 9DR

GBR 59 **EXAMINING BOARD, CONJOINT BOARD OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND**
Examination Hall, 8 Queen Square, London WC1N 3AR

GBR 60 **GENERAL OPTICAL COUNCIL**
41 Harley Street, London W1N 2DJ

GBR 61 **INSTITUTE OF BIOLOGY**
41 Queens Gate, London SW7 5HU

GBR 62 **INSTITUTE OF HEALTH SERVICE ADMINISTRATORS**
75 Portland Place, London W1N 4AN

GBR 63 **PHARMACEUTICAL SOCIETY OF GREAT BRITAIN**
1 Lambeth High Street, London SE1 7JN

GBR 64 **ROYAL COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS**
27 Sussex Place, Regent's Park, London NW1 4RG

GBR 65 **ROYAL COLLEGE OF PATHOLOGISTS**
2 Carlton House Terrace, London SW1Y 5AF

GBR 66 **ROYAL COLLEGE OF PHYSICIANS OF LONDON**
St Andrew's Place, Regent's Park, London NW1 4LE

GBR 67 **ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW**
242 St Vincent Street, Glasgow G2 5RJ

GBR 68 **ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH**
9 Queen Street, Edinburgh EH2 1JQ

GBR 69 **ROYAL COLLEGE OF PSYCHIATRISTS**
17 Belgrave Square, London SW1 OBU

GBR 70 **ROYAL COLLEGE OF RADIOLOGISTS**
28 Portland Place, London W1N 4DE

GBR 71 **ROYAL COLLEGE OF SURGEONS OF EDINBURGH**
18 Nicolson Street, Edinburgh EH8 9DW

GBR 72 **ROYAL COLLEGE OF SURGEONS OF ENGLAND**
Lincoln's Inn Fields, London WC2A 3PN

GBR 73 **ROYAL INSTITUTE OF CHEMISTRY**
30 Russell Square, London WC1B 5DT

GBR 74 **ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE**
28 Portland Place, London W1N 4DE

GBR 75 **SCOTTISH COUNCIL FOR POSTGRADUATE MEDICAL EDUCATION**
8 Queen Street, Edinburgh EHT 1JE

GBR 76 **SOCIETY OF APOTHECARIES OF LONDON**
Apothecaries Hall, Blackfriars Lane, London EC4V 6EJ

GBR 77 **UNIVERSITY OF LONDON INSTITUTE OF BASIC MEDICAL SCIENCES**
Royal College of Surgeons of London, Lincoln's Inn Fields, London WC2A 3PN

British Virgin Islands

There are no institutions of further or higher education or training in the British Virgin Islands (population about 11,500) and after secondary school, young people have to go to other countries for their education. Assistant nurses are trained locally.

The Minister of Health is responsible for the provision of health services, advised primarily by the Permanent Secretary, Ministry of Health, and the Chief Medical Officer on administrative and technical matters.

The main objective of the health policy is to improve the health of the people by providing the maximum opportunity for a healthy existence for the whole community. In particular the policy is to provide protective immunization for the early age groups against all communicable diseases; and to provide a satisfactory level of basic medical care through hospital and clinic facilities to all sections of the community.

Communicable diseases present few problems, probably due to the high levels of immunizations achieved through child health clinics and school health programmes. Maternal and child health services continue to receive considerable attention and attendances at child health, pre-natal, post-natal and family planning clinics are good.

A mental health policy was instituted in 1977, but so far activity has been restricted to Tortola. Plans are being made to extend the cover to the whole of the British Virgin Islands. There is a geriatric problem and a need is developing to build an old people's home to replace the present infirmary. There are two hospitals, one government run and one privately run, the latter specializing in plastic and reconstructive surgery. The nutritional status of the British Virgin Islands is good and there is no malnutrition.

Canada

The provision of health care services in Canada falls mainly within the jurisdiction of the provincial governments. Nevertheless, the federal government plays a significant role in the development of many policies and programmes designed to improve the physical and mental health of all Canadians. The provincial governments have the primary responsibility for health measures to prevent disease, provide treatment and maintain health. Activities such as preventive health services, hospital services, treatment services for tuberculosis and other chronic diseases and rehabilitation and care of the chronically ill and disabled have always, therefore, depended chiefly upon this level of government. Methods of organization, financing and administration vary from province to province.

In addition to administering the hospital and medical care plans and the mental and other types of specialized health facilities, provincial health departments supervise the provision of community health services that are delegated to district or regional health units and city health departments. Administered by regional or city boards or councils, the health units are responsible for most of the preventive health services at the community level, including environmental sanitation, control of infectious diseases and promotion of maternal and child health, mental health and health education.

Most mental and tuberculosis hospitals and clinics are provincially operated or funded, as are special treatment centres for venereal disease, cancer, alcoholism and other specific diseases and the public health laboratories that aid both the health agencies and practising physicians in diagnostic and control procedures. Provincial agencies are also primarily responsible for the collection and analysis of vital statistics and for the study of epidemiological and related social and economic conditions. Other provincial programmes include occupational health, nutrition, health education and pollution control, frequently in collaboration with the federal government.

The Health Programmes Branch of the Department of National Health and Welfare administers the federal aspects of two of Canada's important health programmes: Hospital Insurance and Medical Care Insurance. It also plays a major role in the development and promotion of measures conducive to optimum personal health and in the support of health research.

The Hospital Insurance Programme provides for a system of federal grants-in-aid to the provinces to meet about 50 per cent of the costs of specified in-patient and out-patient services, as set out in the federal Hospital Insurance and Diagnostic Services Act of 1957. It covers about 99.8 per cent of the eligible population of Canada. Federal contributions do not cover the services of tuberculosis hospitals and sanatoria, mental hospitals or institutions providing custodial care, such as homes for the aged. Methods of administration and finance and provision of services above the stipulated minimum required by the Act are left to the provinces.

Under the Medical Care Act the federal government contributes to each participating province half of the national per capita cost of insured medical services for each insured person in that province. In order to be eligible for the federal contribution, provincial plans must: cover all medically required services rendered by a physician; be available to all eligible residents on equal terms and conditions and actually cover at least 95 per cent of them; provide coverage to persons while they are moving between provinces; and be administered by a non-profit authority.

Several methods are used by the provinces to finance their shares of the cost; for example, premiums are levied in Ontario, Alberta, British Columbia and the Yukon Territory. The characteristic mode of paying physicians is a fee for each insured service rendered. Some provincial plans also insure residents for benefits not eligible for cost-sharing by the federal government, such as the services of optometrists, chiropractors, podiatrists, osteopaths, naturopaths and dentists and the costs of some prescribed drugs.

The Medical Services Branch supplements provincial health care services and provides special public health services for Inuit and registered Indians. It is also responsible for health programmes affecting all residents of the Yukon Territory and the Northwest Territories. To meet their needs it operates several hospitals and numerous other health facilities, primarily in isolated northern areas.

Other activities of the branch include the examination and treatment of immigrants and the quarantine control of persons entering or leaving Canada in order to reduce the possibility of importing or exporting certain infectious diseases. It is responsible for health services in national parks and the sanitary surveillance of interprovincial and international common carriers.

The Health Protection Branch is responsible for protecting the public from possible risks to health from foods, drugs, cosmetics and medical devices sold on the Canadian market. Under the Food and Drugs Act, standards for safety and purity in foods are developed through laboratory research and maintained by regular and widespread programmes of inspection. Under the Narcotics Control Act the branch exercises control over traffic in narcotics and hallucinogens. The branch also administers a programme designed to combat the misuse of mood-altering drugs, one important aspect of which is the effort made to persuade smokers to quit and young persons not to start smoking tobacco.

The Long-Range Health Planning Branch generates ideas and reports that provide major long-range health benefits to Canadians. The benefits include better health, lower costs and greater accessibility of health services. Other activities of the branch are directed towards arousing a general awareness among Canadians of the avoidable risks that they impose upon their own health and toward generating concern among health administrators about the extent to which self-imposed risks contribute to sickness and death.

Note

In Canadian universities the academic year begins in September and continues until April or May, usually in two terms. Students from Commonwealth and other overseas countries who fulfil the appropriate admission requirements are considered for acceptance at all Canadian universities. It should be noted that Canada is a bi-lingual country and while the majority of the courses listed are in English, in some universities instruction is in French, while others offer dual-language programmes; in these two cases, some indication is given in the text.

As well as higher degree courses, many universities offer post-graduate diploma courses and speciality training programmes which have been approved by the appropriate national accrediting agency, such as:

Royal College of Physicians and Surgeons of Canada,
74 Stanley Street, Ottawa, Ontario K1M 1P4

Corporation Professionelle des Medecines du Quebec,
Suite 914, 1440 St. Catherine's Street West, Montreal, Quebec H3G 1S5

The information on post-basic courses and programmes has been extracted from the *Directory of Canadian Universities, 1978* published by the Association of Universities and Colleges of Canada, 151 Slater Street, Ottawa, Ontario K1P 5N1 - ISSN 0706-2338 - price C$6.00 (add C$1.00 for postage outside Canada). The Commonwealth Secretariat gratefully acknowledges this assistance.

CAN 1 ANAESTHESIA

Post-basic degrees

Master's degree course in ANAESTHESIA at universities of Saskatchewan and Western Ontario.

Other post-basic programmes

Approved speciality training programmes at universities of Alberta, Calgary, Dalhousie, Manitoba, McGill, McMaster, Memorial, Montreal (in French only), Ottawa (French and English), Queen's and Saskatchewan. Postgraduate diploma at Toronto. There is an Anaesthesia Research Department at McGill University.

CAN 2 **ANATOMY**

Post-basic degrees: Master's degree courses and doctoral studies in ANATOMY at universities of Alberta, British Columbia, Dalhousie, Manitoba, McGill, Montreal (in French only), Ottawa (French and English), Queen's (master's only), Saskatchewan, Sherbrooke (in French only), Toronto and Western Ontario.

Other post-basic programmes: Approved speciality training programmes at Dalhousie, Saskatchewan and Manitoba.

CAN 3 **BACTERIOLOGY**

Post-basic degrees: Master's degree courses (at least 1 year from 1st degree) and doctorates (at least 2 years) at universities of Alberta (master's only), Saskatchewan and Toronto.

Other post-basic programmes: One year postgraduate diploma course at Toronto. Approved speciality training programmes at Saskatchewan. There is a Centre de Recherches en Bacteriologie at the university of Quebec.

CAN 4 **BIOCHEMISTRY**

See also Food sciences, Medical sciences

Post-basic degrees: Master's degree courses and doctoral studies in BIOCHEMISTRY at the following universities: British Columbia, Dalhousie, Manitoba, McGill, McMaster, Montreal (in French only), Ottawa (French and English), Queen's, Saskatchewan, Sherbrooke (in French only), Toronto, Victoria B.C. and Western Ontario; and in MEDICAL BIOCHEMISTRY at Laval (in French only).

Other post-basic programmes: Approved speciality programmes in BIOCHEMISTRY at Manitoba, and Saskatchewan.

CAN 5 **BIOMEDICAL ENGINEERING**

Post-basic degrees: Master's degrees (at least 1 year from first degree) and doctoral studies in BIOMEDICAL ENGINEERING at the universities of Alberta, Manitoba, McGill, Montreal (master's and in French only), New Brunswick, Saskatchewan and Toronto.

CAN 6 **CANCER RESEARCH**

Post-basic programmes: There are no courses as such but research facilities are available in the research institutions of several universities including Alberta (Cancer Research Unit - McEachern Laboratory), McGill (McGill Cancer Research Centre), Saskatchewan (Cancer and Medical Research Institution), and Western Ontario (Cancer Research Laboratory).

CAN 7 **CARDIOLOGY**

See also Surgery - cardiovascular and thoracic

Post-basic degrees: Master's degree (1 year from first degree) and doctorate (at least 2 years) in BLOOD AND CARDIOVASCULAR SYSTEMS at University of McMaster.

Other post-basic programmes	Approved speciality training programmes in CARDIOLOGY at Dalhousie, and Ottawa (French and English).

CAN 8 CLINICAL SCIENCES

Post-basic degrees	Master of CLINICAL SCIENCES (for holders of MD + 1-year internship) at university of Western Ontario; master's degree and doctoral studies (in French only) at Montreal and Sherbrooke; master's and doctoral studies in CLINICAL CHEMISTRY/BIOCHEMISTRY at Toronto.
Other post-basic programmes	Diploma in CLINICAL CHEMISTRY (2 years beyond MD or PhD) at Toronto; approved speciality programmes in CLINICAL CHEMISTRY/BIOCHEMISTRY at Toronto, and in CLINICAL BEHAVIOURAL SCIENCES at McMaster.

CAN 9 COMMUNICATION DISORDERS

Post-basic degrees	Master's degree course in COMMUNICATION at university of Montreal (in French only); in COMMUNICATIVE DISORDERS at Dalhousie and Western Ontario; in SPEECH PATHOLOGY AND AUDIOLOGY at British Columbia, Dalhousie, McGill and Western Ontario; in SPEECH THERAPY AND AUDIOLOGY at Montreal (in French only). Doctoral studies at McGill.
Other post-basic programmes	Diploma in SPEECH PATHOLOGY at Toronto (2 years beyond bachelor's degree). Approved speciality programme in SPEECH THERAPY AND AUDIOLOGY at Sherbrooke (in French only). There is a School of Human Communication Disorders at McGill, and the McGill University Project for Hearing Impaired Children.

CAN 10 DENTISTRY

Post-basic degrees	Full-time higher degree courses (master's 1-2 years, doctoral studies 2 years) are open to candidates with appropriate qualifications in dentistry at the following universities: DENTAL MEDICINE at Montreal (master's, in French only); DENTISTRY, master's only at Alberta, Dalhousie and Western Ontario, master's/doctoral at Manitoba and Toronto; ORAL BIOLOGY/PATHOLOGY (master's and doctoral) at Alberta, Manitoba and Toronto; ORAL SURGERY/ANAESTHESIA (master's) at Dalhousie and McGill; ORTHODONTICS, PAEDODONTICS, PERIODONTICS (master's) at Manitoba, Montreal (in French only) and Western Ontario. PREVENTIVE PROSTHODONTICS (master's) at McGill. DENTISTRY (master's and doctoral) at Toronto; RESTORATIVE DENTISTRY AND PROSTHODONTICS (master's) at McGill.
Other post-basic programmes	Diploma courses include DENTAL PUBLIC HEALTH (1 year), ORAL SURGERY AND ANAESTHESIA (3 years), ORAL PATHOLOGY (3 years) all at Toronto; ORTHODONTICS (2 years) and PAEDODONTICS (2 years) at Toronto and Montreal (in French only); PERIODONTICS at Toronto (2 years) and Manitoba (3 years).

CAN 11 DERMATOLOGY

Post-basic programmes	Approved speciality programmes in DERMATOLOGY at universities of McGill, Montreal (in French only), Ottawa (French and English), and Toronto.

CAN 12 **EPIDEMIOLOGY**

Post-basic courses: Master's degree and doctoral studies in EPIDEMIOLOGY AND COMMUNITY HEALTH at universities of McGill, Queen's, Toronto and Western Ontario.

Other post-basic programmes: Postgraduate diploma courses (1 year beyond MD degree) at McGill and Toronto. There is a Centre de Recherches en Epidemiologie et en Medicine Preventive at Quebec University.

CAN 13 **FOOD SCIENCES**

Post-basic degrees: Master's degrees (at least 1 year from first degree) and doctoral studies at the following universities: APPLIED HUMAN NUTRITION at Guelph; FOOD BIOCHEMISTRY (master's only) at Toronto; FOOD MANAGEMENT AND ADMINISTRATION at Guelph; FOOD SCIENCE at Alberta and Saskatchewan; FOOD AND NUTRITION (master's only) at Alberta and Manitoba; HUMAN NUTRITION at Guelph; NUTRITION (master's and in French only) at Montreal; and at Laval (doctoral and in French only); NUTRITIONAL BIOCHEMISTRY at Victoria, B.C.

Other post-basic programmes: Diploma course (1 year) in NUTRITION at Toronto.

CAN 14 **GASTRO-ENTEROLOGY**

Post-basic programmes: Approved speciality programme in GASTRO-ENTEROLOGY at university of Ottawa (in French only).

CAN 15 **GENETICS**

Post-basic degrees: Master's degree courses in GENETICS (at least 1 year from first degree) and doctoral studies at universities of Alberta, British Columbia, Dalhousie, Guelph, Laval (in French only), McGill and Saskatchewan; in MEDICAL GENETICS at British Columbia.

CAN 16 **HAEMATOLOGY**

Post-basic programmes: Approved postgraduate programmes in HAEMATOLOGY at Dalhousie university.

CAN 17 **HEALTH ADMINISTRATION**

Post-basic degrees: Master's degree courses (2 years) in HEALTH SERVICES ADMINISTRATION at universities of Alberta, British Columbia, Montreal (in French only), Ottawa (French and English), and Toronto (also doctoral studies); in HOSPITAL ADMINISTRATION at Ottawa (French and English) and Toronto.

Other post-basic programmes: Diploma course (2 years) in HOSPITAL ADMINISTRATION at Toronto.

CAN 18 HEALTH SCIENCES

Post-basic degrees: Master's degree course in HEALTH SCIENCES (1 year after honours bachelor degree) at McMaster, and in HEALTH STUDIES at Waterloo.

CAN 19 HYGIENE/COMMUNITY HEALTH

See also Epidemiology

Post-basic degrees: One year for master of science in HYGIENE at university of Montreal (in French only); also doctoral studies. Master's and doctoral studies in ENVIRONMENTAL HEALTH at Toronto.

Other post-basic programmes: Certificate course (1 year) and diploma course (1 year after MD) in PUBLIC HEALTH at Toronto.

CAN 20 IMMUNOLOGY

See also Microbiology

Post-basic degrees: Master's degree courses in IMMUNOLOGY at universities of Alberta, Manitoba, Ottawa and Western Ontario; doctoral studies at Ottawa and Western Ontario.

Other post-basic programmes: University research institutes are Centre de Recherches en Immunologie (Quebec), and Institute of Immunology (Toronto).

CAN 21 INDUSTRIAL HEALTH

Post-basic programmes: Diploma course in INDUSTRIAL HEALTH (1 year beyond MD) at the university of Toronto. The Mineral Industry Research Occupational Health and Safety Unit is at McGill university.

CAN 22 MEDICAL RESEARCH

Post-basic programmes: Most of the Canadian universities with medical faculties also provide MEDICAL RESEARCH facilities. These are often linked with programmes of study for higher degrees or professional qualifications. Research facilities may be provided in associated research institutions of these universities, some of which are mentioned under relevant subject headings (see, for example, Anaesthesia, Bacteriology etc.). Some of the other important research institutions linked with these universities, but not mentioned elsewhere, are: Alberta - Aberhart Memorial Tuberculosis Sanatorium (CHEST DISEASES) Centre for the Study of Mental Retardation; Surgical-Medical Research Institute. Dalhousie - Sir Charles Tupper Medical Complex; Atlantic Research Centre for Mental Retardation. McGill - Artificial Organs Research Unit; Aviation Medical Research Unit (AVIATION MEDICINE); Institute of Parasitology; Memorial - Research Unit on Vector Pathology PARASITOLOGY); Toronto - Banting and Best Department of Medical Research. Western Ontario - Health Care Research Unit.

CAN 23 MEDICAL SCIENCES

See also Biochemistry

Post-basic degrees: Master's degree courses (1-2 years) in MEDICAL/BIOCHEMICAL SCIENCES, and doctoral studies, at universities of McGill, McMaster, Toronto, Western Ontario, and Calgary (master's only). Master's and doctoral in MEDICAL BIOPHYSICS at Toronto, Dalhousie and Sherbrooke (in French only); and in MEDICAL CELL BIOLOGY at Toronto, and at Sherbrooke (in French only); and in MEDICAL BIOCHEMISTRY at Laval (in French only).

CAN 24 MEDICINE

See also Physical medicine

Post-basic degrees: Master's degree courses and doctoral studies in MEDICINE at universities of Alberta, British Columbia, Calgary, Dalhousie, Laval (in French only), McGill, McMaster, Memorial, Montreal (in French only), Ottawa (French and English), Queen's (master's only), Saskatchewan, Toronto and Western. Specialities include COMMUNITY MEDICINE at Montreal (master's and in French only); EXPERIMENTAL MEDICINE at Alberta (master's only), and McGill; EXPERIMENTAL MEDICINE AND SURGERY at Laval and McGill (both in French only); FAMILY MEDICINE (master's only) at Western Ontario; INTERNAL MEDICINE at Manitoba (master's only); INVESTIGATIVE MEDICINE at McGill (master's only).

Other post-basic programmes: Approved speciality programmes and/or diploma courses include: COMMUNITY MEDICINE at Ottawa (in French only); FAMILY MEDICINE at Dalhousie, McGill, McMaster, Ottawa, Saskatchewan and Western Ontario; INTERNAL MEDICINE at Alberta, Calgary, Dalhousie, Manitoba, McGill, McMaster, Memorial, Montreal (in French only), Ottawa (French and English) Queen's, Saskatchewan, Toronto and Western Ontario. LABORATORY MEDICINE at Dalhousie and Ottawa.

CAN 25 MICROBIOLOGY

See also Immunology

Post-basic degrees: Master's degree courses (1-2 years) and doctoral studies in MICROBIOLOGY/IMMUNOLOGY at the following universities: Alberta, British Columbia, Dalhousie, Guelph, Laval (in French only), Manitoba, McGill, McMaster, Montreal (in French only), New Brunswick, Ottawa (French and English), Queen's, Saskatchewan, Sherbrooke (in French only), Toronto, Victoria B.C., Western Ontario, and Windsor.

Other post-basic programmes: Approved speciality programmes and/or diploma courses at universities of Dalhousie, Manitoba, Saskatchewan and Montreal (in French only).

CAN 26 NEUROLOGY

Post-basic degreed: Master's degree courses (1-2 years) and doctoral studies at the following universities: NEUROLOGY at Laval (in French only); NEUROLOGY/NEUROLOGY SCIENCES at British Columbia (master's only), McGill, and McMaster; NEUROLOGY/NEUROSURGERY at Montreal (in French only); NEUROSURGERY at McGill.

Other post-basic programmes: Other approved speciality programmes include NEUROLOGY/NEUROSURGERY at Ottawa (in French only); NEUROLOGY/NEUROLOGY SCIENCES at Alberta, Dalhousie, McGill, McMaster, Ottawa, Queen's, Saskatchewan, Toronto and Western Ontario; NEUROSURGERY at Alberta, Calgary, Dalhousie, McGill, Ottawa, Saskatchewan, Toronto and Western Ontario. Associated research

institutes include Montreal Neurological Institute (McGill), and Centre de Recherches en Sciences Neurologiques (Montreal).

CAN 27 **NURSING**

Post-basic degrees: Master's degree courses (usually 2-4 years following bachelor degree and RN) in NURSING at universities of Alberta, British Columbia, Dalhousie, McGill, Toronto and Western Ontario; in COMMUNITY HEALTH NURSING at Dalhousie and Toronto; in MEDICAL AND SURGICAL NURSING at Toronto and Montreal (in French only); in NURSING ADMINISTRATION at Dalhousie and Montreal (in French only); in NURSING CURRICULUM DEVELOPMENT at Dalhousie; in NURSING EDUCATION at Western Ontario; in NURSING SCIENCES at Montreal (in French only); in NURSING SERVICE ADMINISTRATION at Alberta and Western Ontario; in PSYCHOLOGICAL NURSING at Toronto.

Other post-basic programmes: Special certificate/diploma programmes for qualified and experienced RNs include COMMUNITY NURSING and COMMUNITY HEALTH NURSING at Concordia; COMMUNITY NURSING at Concordia; and Quebec (in French only); advanced OBSTETRICAL NURSING at Alberta; PUBLIC HEALTH NURSING at Toronto. Other subjects are covered as minor specializations of courses offered at many of the above institutions.

CAN 28 **OBSTETRICS & GYNAECOLOGY**

Post-basic degrees: Master's degree course (2-4 years) in OBSTETRICS & GYNAECOLOGY at universities of Toronto and Western Ontario; in EMBRYOLOGY at Laval (also doctoral, both in French only).

Other post-basic programmes: Approved speciality programmes and/or diploma courses at Alberta, Calgary, Dalhousie, Manitoba, McGill, McMaster, Memorial, Montreal (in French only), Ottawa (French and English), Queen's, Saskatchewan, and Western Ontario.

CAN 29 **OPHTHALMOLOGY**

Post-basic degrees: Master's degree course (2-4 years) in OPHTHALMOLOGY at Alberta and Western Ontario.

Other post-basic programmes: Approved speciality programmes and/or diploma courses in OPHTHALMOLOGY/ OPHTHALMIC SCIENCES at Dalhousie, Manitoba, McGill, McMaster, Montreal (in French only), Ottawa (French and English), Queen's, Saskatchewan, Toronto.

CAN 30 **ORTHOPAEDICS**

Post-basic programmes: Approved speciality programmes and/or diploma courses in ORTHOPAEDICS at universities of Montreal and Ottawa (both in French); and in ORTHOPAEDIC SURGERY at Alberta, Calgary, Dalhousie, McGill, McMaster, Memorial, Ottawa, Queen's, Saskatchewan, Toronto and Western Ontario.

CAN 31 **OTOLARYNGOLOGY**

Post-basic degrees: Master's degree courses (2-4 years) in OTOLARYNGOLOGY at universities of McGill, Toronto and Western Ontario.

Other post-basic programmes	Approved speciality programmes and/or diploma courses at Alberta, Dalhousie, Manitoba, McGill, Montreal (in French only), Queen's and Sherbrooke (in French only).

CAN 32 **PAEDIATRICS**

Post-basic degrees	Master's degree courses (2-4 years) in PAEDIATRICS at universities of Alberta, British Columbia, Manitoba, Queen's, Toronto (also doctoral studies) and Western Ontario. Master's and doctoral in GROWTH AND DEVELOPMENT at McMaster.
Other post-basic programmes	Approved speciality programmes at Calgary, Dalhousie, Manitoba, McGill, McMaster, Memorial, Montreal (in French only), Ottawa (French and English), Saskatchewan.

CAN 33 **PATHOLOGY**

Post-basic degrees	Master's degree courses (1-4 years) and doctoral studies in PATHOLOGY at universities of British Columbia, McGill, Laval (in French only), McGill, Montreal (in French only), Ottawa (French and English), Queen's, Toronto and Western Ontario, master's only at Alberta, Dalhousie, Manitoba and Saskatchewan. Master's and doctoral studies in PATHOLOGICAL CHEMISTRY AT TORONTO.
Other post-basic programmes	Approved speciality programmes in PATHOLOGY at Dalhousie, Manitoba, Montreal (in French only), and Saskatchewan.

CAN 34 **PHARMACOLOGY**

Post-basic degrees	Master's degree courses (1-4 years) and doctoral studies in PHARMACOLOGY at universities of Alberta, British Columbia, Dalhousie, Laval (in French only), Manitoba, McGill, Montreal (in French only), Ottawa (French and English), Queen's, Saskatchewan, Sherbrooke (in French only), Toronto, and Western Ontario. Master's in CLINICAL PHARMACOLOGY (in French only) at Quebec: Institut National de la Recherche Scientifique
Other post-basic programmes	Approved speciality programmes in PHARMACOLOGY at Manitoba and Saskatchewan.

CAN 35 **PHARMACY**

Post-basic degrees	Master's degree courses (1-2 years) and doctoral studies at the following universities: BIOPHARMACEUTICS at Alberta, Dalhousie (master's only); CLINICAL PHARMACY at British Columbia (master's only); HOSPITAL PHARMACY at Alberta and Dalhousie (both master's only); MEDICINAL CHEMISTRY (PHARMACY) at Montreal (in French only); PHARMACEUTICAL CHEMISTRY at Alberta, British Columbia and Toronto; PHARMACEUTICAL MICROBIOLOGY at Manitoba (master's only); PHARMACEUTICS at Alberta, British Columbia, Dalhousie (master's only), and Saskatchewan; PHARMACOGNOSY at Alberta, Dalhousie (master's only), Montreal (in French only), Saskatchewen, and Toronto; PHARMACY at Alberta, British Columbia, Dalhousie (master's only), Laval (in French only), Manitoba (master's only), Montreal (in French only), Saskatchewan and Toronto; PRODUCT MANUFACTURING & DEVELOPMENT (PHARMACY) at Alberta; RADIOPHARMACY at Alberta (master's only) and British Columbia; TOXICOLOGY at McGill (doctoral only) and Saskatchewan.

Other post-basic programmes: Diploma course in HOSPITAL PHARMACY (1 year and in French only) at Montreal.

CAN 36 PHYSICAL AND REHABILITATION MEDICINE

See also Communication disorders, Therapeutics

Post-basic degrees: Master's degree courses in PHYSICAL MEDICINE AND REHABILITATION at universities of McGill and Saskatchewan; in PHYSICAL THERAPY at McGill; and in REHABILITATION MEDICINE at Saskatchewan.

Other post-basic programmes: Approved speciality programmes and/or diploma courses include PHYSICAL MEDICINE AND REHABILITATION at Alberta, Dalhousie, McMaster, Montreal (in French only), Queen's, Saskatchewan and Toronto; TEACHING OF OCCUPATIONAL THERAPY (2-year certificate) at Alberta and Toronto; TEACHING OF PHYSICAL THERAPY at Toronto.

CAN 37 PHYSIOLOGY

Post-basic degrees: Master's degree courses and doctoral studies in PHYSIOLOGY at the universities of Alberta, British Columbia, Dalhousie, Laval (in French only), Manitoba, McGill, Montreal (in French only), Ottawa (French and English), Queen's (master's only), Saskatchewan, Sherbrooke (in French only), Toronto and Western Ontario, also in APPLIED PHYSIOLOGY at Toronto.

Other post-basic programmes: Approved speciality programmes at Manitoba and Saskatchewan.

CAN 38 PSYCHIATRY

Post-basic degrees: Master's degree courses in PSYCHIATRY at universities of British Columbia, Manitoba, McGill, Queen's, Saskatchewan (also doctoral studies), and Western Ontario.

Other post-basic programmes: Approved speciality programmes and/or diploma courses at Alberta, Calgary, Dalhousie, Manitoba, McGill, McMaster, Memorial, Montreal (in French only), Ottawa (French and English), Queen's, Saskatchewan and Toronto.

CAN 39 RADIOLOGY

Post-basic degrees: Master's degree courses at the following universities: RADIOBIOLOGY at Sherbrooke (in French only); DIAGNOSTIC RADIOLOGY at Alberta, and Western Ontario; THERAPEUTIC RADIOLOGY at Alberta and Western.

Other post-basic programmes: Approved speciality programmes and/or diploma courses in DIAGNOSTIC RADIOLOGY at Calgary, Dalhousie, Manitoba, McGill, McMaster, Memorial, Ottawa (French and English), Queen's, and Saskatchewan; and in THERAPEUTIC RADIOLOGY at Alberta, Dalhousie, McGill, Montreal (in French only), Queen's, Saskatchewan and Toronto.

CAN 40 **RHEUMATOLOGY**

Post basic-programme: Approved speciality programme in RHEUMATOLOGY at university of Dalhousie.

CAN 41 **SURGERY**

See also Orthopaedics

Post-basic degrees: Master's degrees and doctoral studies in SURGERY/EXPERIMENTAL SURGERY at the following universities: Alberta, British Columbia (master's only), Laval (in French only), Manitoba (master's only), McGill, McMaster, Queen's (master's only), Saskatchewan (master's only) and Western (master's only).

Other post-basic programmes: Approved speciality training programmes at Calgary, Dalhousie, Manitoba, McMaster, Memorial, Montreal (in French only), Ottawa (French and English), and Saskatchewan; and in CARDIOVASCULAR AND THORACIC SURGERY at Alberta, British Columbia, McGill, McMaster, Montreal (in French only), Ottawa (French and English), Queen's, Toronto and Western Ontario; and in PLASTIC SURGERY at Alberta, Dalhousie, McGill, Montreal (in French only), Saskatchewan, Toronto and Western Ontario.

CAN 42 **THERAPEUTICS**

See also Physical and rehabilitation medicine

Post-basic degrees: Master's degree course in THERAPEUTICS at universities of Manitoba and McGill; doctoral studies at McGill.

CAN 43 **UROLOGY**

Post-basic programmes: Approved speciality training programmes in UROLOGY at universities of Alberta, Dalhousie, McGill, Montreal (in French only), Ottawa (French and English), Queen's, Toronto and Western Ontario.

CAN 44 **VIROLOGY**

Post-basic degrees: Doctoral studies in VIROLOGY (in French only) at the Institut Armand-Frappier, University of Quebec. A second associated research institute of the university is the Centre de Recherches en Virologie.

Cayman Islands

For the purposes of primary medical care, the Cayman Islands are divided into six health districts, George Town, West Bay, Bodden Town, East End and North Side on the island of Grand Cayman, and the island of Cayman Brac (which serves also the island of Little Cayman). All these districts, except Cayman Brac, are served by one public health community nurse, assisted by one practical nurse (SEN). These centres provide preventive and clinical medical services and are visited on a sessional basis by one physician to each district. Supplies and pharmaceuticals are provided by the government public general hospital in George Town on a weekly basis.

The services rendered include maternal and child health, pre-natal, post-natal, immunization, family planning and genetic counselling services. In some districts cancer-screening (breast and uterine cervix) services are also provided. At present these services are supervised by the Chief Medical Officer and the Chief Nursing Officer, but recommendations have been made for the appointment of a Medical Officer (Environmental Physician) at an early date.

CAY 1

There are no training facilities for medical personnel on the Cayman Islands, except for enrolled nurse training at the Cayman Islands hospital.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Cook Islands

The total landmass of the Cook Islands is only 93 square miles, but this is distributed over 15 small Islands (three unpopulated), scattered over an area of 850,000 square miles of ocean. The population at the 1976 census was 18,112, half of whom live on Rarotonga, the largest of the islands and the administrative centre. Every populated island is linked by radio communication and by ship with Rarontonga though the shipping service to Penrhyn in the north and Pukapuka in the north-west, at 756 and 736 miles away respectively, is at six week intervals. The islands of the south have airports and are about an hour's flight from Rarotonga.

After the second world war, health manpower training in the Cook Islands was accelerated with the aid of international agencies, and now, after many years of development, the health service is able to provide for the health needs of every community, large or small, in spite of the geographical difficulties.

In Rarotonga itself health care is administered through the general hospital, and two district out-patient clinics. The district clinics are staffed by a staff nurse and visited regularly by a doctor during island rounds. In addition there are health centres, and some 32 maternal and child health clinics, managed by public health nurses, whose role it is to look after the health of the mother during pregnancy and the child up to the age of five. The public health nurses advise on nutrition, child care and feed, personal and food hygiene, as well as visiting the homes of sick mothers or children, paying regular visits to schools and organizing immunization. Any mother or child showing signs of more serious illness is referred to the doctor. There are also four licensed private practitioners practising on Rarotonga.

Public health inspection plays a major role in the islands, concentrating its effort in preventive measures in the areas of disease control, food hygiene, environmental sanitation, vector control and waste disposal, and health education. Once a year a general inspection of every home is carried out, to see that homes and their surrounding areas comply with health standards. This inspection - known as 'Tutaka' - has become an annual event organized by the Division of Public Health with women's organizations and leaders of the community participating.

The island of Aitutaki, with a population of 2,600 has a new 25-bed hospital ready for occupation (1978). The island has two doctors, three health inspectors, four hospital staff nurses and two public health nurses. There are four islands with no doctor of their own: Mitiaro (321 people, and an hour away by air), Nassau (150 people, and 4 days away by ship), and Palmerston (70 people, and 2 days away by ship) all have a medical assistant; Rakahanga (280 people, and 3 days away by ship) has a medical assistant and a male nurse. The medical assistants are trained in the basic signs of recognition of illness and treatment, and seek advice by radio communication of those cases beyond their skills. They also attend to simple dental care and extractions and carry out public health programmes and attend obstetric cases.

All the other islands have resident medical officers, public health inspectors, clinical nurses, public health nurses, and - in the southern group islands - dentists; in the north, dental care is met by the resident doctors.

At present the only training for health personnel available in the Cook Islands is the 3-year nursing course offered by the School of Nursing, which awards a certificate similar to that in community nursing in New Zealand. The Fiji School of Medicine has the responsibility of training most of the doctors, public inspectors, dentists, pharmacists, laboratory and X-ray technicians who maintain the health services of the Cook Islands. Primary health care in the islands does not include the services of recognized traditional practitioners (the Taunga) but a move towards looking into those of the traditional medicines which may be of some value has been initiated. Community participation is being encouraged especially in the programme of maternal and child health.

The health service of the country is free to every Cook Islander and permanent resident, and is the responsibility of the state. Even for patients treated by private practitioners, the cost of drugs is borne by the government. The cost of the health service is a heavy burden to bear for a developing nation with meagre resources, thus the promotion of good health is of paramount importance. It is interrelated with social economic growth and consistent with the basic principles of healthy living, fresh air, food and housing, and should not depend on actual treatment by drugs.

CK1 1 **COOK ISLANDS SCHOOL OF NURSING**

Enquiries — Director, Division of Nursing, Ministry of Health, P.O. Box 109, Rarotonga. Telegram: Health, Rarotonga

General details — 1)From Feb 2) 6 3)None 4)English 5)No students from other countries have so far been accepted, and this is not envisaged for the near future.

Courses — ** NURSING
3-year course in general nursing, leading to Cook Islands Registered Nurse certificate, to provide staff nurses for community and hospital services in the Cook Islands.
Completion of Form 5 (13 years of schooling), with special consideration to candidates with C.I. School Certificate credits; minimum age 17.

Note — The WHO is collaborating in the development of basic nursing education, and in continuing education programmes; this is expected to continue through 1980.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Cyprus

Medical care is delivered to the people of Cyprus by the public health services and by the private sector of the profession. The public health sector provides preventive, curative, and restorative health care free of charge or at reduced nominal fees, to all citizens of the lower and middle income sections of the community. It provides free medical care to all members and their dependants of the civil service, the armed forces and the police; it provides medical care to all industrial and other workers who sustain injuries or occupational diseases arising out of, or in the course of, their employment.

Primary health care is delivered to the people in out-patient departments of the island's General Hospitals, in rural health centres, in maternal and child health clinics, by the school health service, and by the public dental services, which also have five mobile dental units for the regular visiting of school children.

When a patient needs specialized treatment he is referred by his GP - who may be stationed either in the out-patients department of a general hospital or in a rural health centre - to the specialists who are working in the various departments of the general hospitals of the island.

CYP 1 **PUBLIC HEALTH INSPECTORS' TRAINING SCHOOL**

Enquiries: Chief Health Inspector, Medical Department, Nicosia. Tel: 40/2425.

Managing agency: Ministry of Health, Nicosia

General details: 1)From Jan 2) 24 3)None 4)English 5)No students from other countries have so far been accepted, but this is not ruled out.

Courses:
** PUBLIC HEALTH INSPECTION
2-year course of training for public health inspectors, to provide trained staff for the government and municipalities. The course leads to the Diploma for Public Health Inspectors for local overseas appointments, issued by the Royal Society of Health, London.
Secondary School leaving certificate, age not over 25 years.

Note: The school functions about every five years, or according to the needs of the government for trained public health inspectors.

CYP 2 **SCHOOL OF NURSING AND MIDWIFERY**

Enquiries: Senior Nurse Tutor, School of Nursing and Midwifery, General Hospital, Nicosia.

Managing agency: Ministry of Health

General details: 1)From Jan 2) 156 3) 202f 4)English (3-year course) and Greek/Turkish (others) 5) 4 RNs were accepted from Arab countries for a midwifery course; students from other countries not normally accepted on a regular basis.

Courses:
* NURSING/PSYCHIATRIC NURSING
2-year course for assistant nurse - general or psychiatric nursing; to provide staff for government health services and private hospitals and clinics.
At least 10 years general education, age 17-35 years.

** NURSING
3-year course for general Registered Nurse, to provide professional nurses.
12 years general education and a good knowledge of English; age 17-35 years.

** MIDWIFERY
2-year course in midwifery, to provide Registered Midwives for government health services and private clinics.
12 years general education 18-35 years.

** COMMUNITY HEALTH VISITING
21-month course in community health visiting, leading to qualification of Registered Midwife & Community Health Visitor.
12 years general education and Registered Assistant nurse (general) qualification; age 20-28 years.

** MENTAL NURSING
2-year course for Mental Registered Nurse, in-service training to provide better qualified nurses for the government psychiatric institutions.
12 years general education and Registered Assistant nurse (psychiatric) qualification.

*** MIDWIFERY
1-year post-basic course in midwifery, leading to Registered Midwife qualification.
GRN with satisfactory professional record and very good knowledge of English; age 21-38 years.

Note

The School of Nursing and Midwifery is affiliated with the School of Psychiatric Nursing and the Psychiatric Institutions and students are posted there for at least 8 weeks where they gain experience in psychiatric nursing. The WHO supplies the school with nursing magazines, as well as any of its own publications relating to health matters.

The Nicosia General is an accredited hospital, providing facilities for the practical training of newly qualified medical graduates, who are required by law to undergo a practical training of 18 months duration.

CYP 3 SCHOOL OF NURSING PSYCHIATRIC INSTITUTIONS, ATHALASSA

Enquiries

Psychiatric Tutor in Charge, School of Nursing Psychiatric Institutions, Athalassa. Tel: 22101, ext. 29.

Managing agency

Ministry of Health

General details

1)From Nov 2) 48 3)None 4)Greek & English 5)No students from other countries have so far been accepted, but this is not ruled out.

Courses

* NURSING
2-year course for State Enrolled Nurse certificate, to provide hospital staff.
Minimum 10-12 years schooling, and preferably with Secondary School leaving certificate.

** MENTAL NURSING
2-year course for Registered Mental Nurse certificate.
Secondary School leaving certificate, or State Enrolled Nurse certific certificate.

*** PSYCHIATRIC NURSING ADMINISTRATION
1-year course, leading to certificate in nursing administration (psychiatric), to provide staff for senior nursing posts.
Registered mental nurse.

(Continued)

Note

The School also provides in-service education for nursing staff as well as for the occupational therapy department staff, and it organizes two-week orientation courses for the staff employed at the Severely Retarded Unit attached to the Psychiatric Institutions, Athalassa.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Dominica

Dominica is the third largest island nation, after Jamaica and Trinidad, of the English-speaking Caribbean. Its estimated population in 1978 was 80,000. Because it is all mountainous, the villages and towns are mostly around the coast, and most roads are very tortuous, twisting up into the mountains, then down to the shore again. For this reason the 44 health centres are scattered mostly around the coast.

Each health centre has a registered nurse/midwife who holds ante-natal and child health clinics, treats all minor illness, and delivers women in their homes. For larger villages there are two nurse/midwives, but there are no auxiliary health workers. There are ten district health inspectors, one for each district, and ten health visitors.

District medical officers visit the larger health centres for treatment clinics either weekly, fortnightly or monthly, depending on the population. In practice the district nurse/midwife is, however, the nurse practitioner for her village, and visits patients in their homes when necessary.

DOM 1 **PRINCESS MARGARET HOSPITAL - SCHOOL OF NURSING**

Enquiries: Principal Tutor, School of Nursing, Princess Margaret Hospital, Goodwill. Tel: 2231-8.

Managing agency: Ministry of Health

General details: 1)Varies, usually Sep or Oct for nursing, Jan for midwifery 2) 20 3) 5Of 4)English 5)Students from other Caribbean countries have been accepted, no fixed annual intake.

Courses:

** NURSING
3-year certificate course in general nursing, covering all areas of clinical nursing as well as other related subject.
Minimum 3 GCE 'O' levels including English and, preferably, a science subject. Minimum age 18 years.

*** MIDWIFERY
lO-month post-basic course in midwifery, including pre and post natal care, delivery and care of neonate, family planning, etc. to train staff for hospitals and community health nursing services.
Registered nurses.

Fiji

The central health authority in Fiji is the Ministry of Health under the Minister of Health. Government is therefore responsible for running the health service, which is maintained by 60 private medical practitioners, 12 dentists, two private mission hospitals, chiropractors, acupuncturists and other non-government agencies providing some sort of basic health service.

Curative or therapeutic services are delivered by health personnel from special, divisional and sub-divisional hospitals, from health centres, and by district- and zone-nurses. The services provided at these levels vary from simple medical procedures and treatment at the lowest level to the highly specialized services offered by the special and divisional hospitals. Services are delivered in two ways: out-patient care at the district nursing stations, health centres and out-patient departments of hospitals; or in-patient care when the patient's condition necessitates admission to sub-divisional or special hospitals.

Referral of patients from the lowest to the highest level is well recognized by all those responsible for health delivery, and it is a well established system. Similarly referral takes place from the highest to the lowest level when it is necessary to continue treatment on a domiciliary basis.

Preventive services are concentrated on immunization, family planning, maternal and child care, and school, dental and environmental health. Dramatic results have been obtained through immunization in preventing and reducing the incidence of tuberculosis, poliomyelitis, tetanus, whooping cough, diptheria and rubella, with about 100 per cent coverage by district- and zone-nurses under their respective divisional or sub-divisional health sisters.

All school children are regularly checked about their immunization status by the nursing staff. The dental services concentrate on preventive dentistry, although a fair amount of clinical dentistry is performed at the divisional and sub-divisional centres. Regular visits are made to the outer areas by the dental team from the divisional and sub-divisional headquarters. In the area of environmental health, the health inspectorate personnel are responsible for ensuring that legislation related to housing, water supply, sewage, refuse disposal, public conveniences and public eating houses is adhered to. They provide professional and technical advice to city and town councils and to rural authorities.

The recently formed family health unit of the Ministry has been assigned the task of promoting family planning and health education within and outside the Ministry. All health workers at different levels of the health organization and also new recruits from the community will take part. The most important aspect for further success is motivation of the people to accept family planning readily for their own and for the national benefit.

The maternal and child health service embraces the care of pregnant mothers, birth and post-natal care of both mothers and the new-born. Because of the risk of unforeseeable complications to both mother and child, delivery takes place in maternity units of divisional and sub-divisional hospitals. In cases and areas where nursing personnel are not readily available to attend mothers during birth, traditional birth attendants usually fill the gap. Ante-natal and post-natal clinics are held in all hospitals except the three special hospitals. In the rural areas the nursing staff carry out regular checks on mothers and are responsible for the immunization status of children.

The Fiji School of Medicine and the Fiji School of Nursing are responsible for training health service personnel required to provide health services at different levels of health organization. Post-graduate training of staff responsible for the delivery of specialized services at different levels is part of the in-service training programme carried out by the Ministry both locally and abroad.

Finally it is worth emphasizing that changes in mass attitudes brought about by health workers can and should assist materially in bringing about socio-economic changes. Promotive services that include the right kind of health education are a powerful means of convincing people that the future can be different from the past, a step of importance in disease-ridden areas where a fatalistic attitude is the rule. Following the national seminar on primary health care held in Fiji in 1977, two pilot projects have been launched, based on the concept of health by the people for the people. One project based purely on community involvement, right from the planning and decision-making stages to implementation, has transformed eight villages to a completely new outlook, not only from the health point of view but also from the socio-economic aspect of village life.

FIJ 1 **FIJI SCHOOL OF MEDICINE**

Enquiries: Principal, Fiji School of Medicine, Tamavua, Suva.

Managing agency: Ministry of Health

General details: 1)Feb-Dec, in 2 semesters 2) 273 3) 153m & 120f 4)English 5) 46 students per annum are accepted from other South Pacific territories.

Relevant departments: Anatomy - Clinical - Hygiene - Nutrition and dietetics - Pathology - Physiology and biochemistry - Physiotherapy - Radiology - Social and preventive medicine.

Courses:

** PUBLIC HEALTH/HYGIENE
1 year of training, followed by 1 year supervised field work, for assistant health inspectors, leading to Certificate in Theory. Successful students may proceed to further 2-year course, leading to the Certificate in Public Health Inspector for General Overseas Appointments (Royal Society for the Promotion of Health, London).
NZ School Certificate in maths and one science subject for assistant's course; candidates for inspector's course should have completed at least 4 years satisfactory service as Assistant Health Inspector.

** MEDICAL ANCILLARY
3-year courses in physiotherapy, laboratory technology, radiography, dental hygiene; and in pharmacy, leading to Certificate in Pharmacy.
NZ School Certificate in two subjects, including physics or biology for physiotherapy, chemistry for laboratory technology and pharmacy, and physics for radiography; or equivalent.

** DIETETICS
3 year course, leading to the Certificate in Dietetics, to provide institutional dietitians.
NZ School Certificate in two subjects, including chemistry. Normally women students only, although an exception could be made for overseas.

*** MEDICINE
5-year course, leading to the Diploma of Surgery and Medicine (DSM) of the Fiji School of Medicine. The first two years cover general sciences, anatomy, histology, physiology, biochemistry. Thereafter practical experience and instruction is at the Colonial War Memorial Hospital in wards and clinics.
Pass in NZ University Entrance exam, in English, maths, chemistry, biology or physics; or pass in Preliminary I science at University of the South Pacific, or acceptable equivalent.

*** DENTISTRY
4-year course, leading to the Diploma of Dental Surgery (DSD) of the Fiji School of Medicine.
As for medicine, above.

Note — The school has new courses for junior medical and dental assistants, but these are currently for Fiji students only. Postgraduate medical training may be given by special arrangement. See FIJ 3.

FIJ 2 FIJI SCHOOL OF NURSING

Enquiries — Principal, Fiji School of Nursing, Tamavua, Suva. Tel: 381066 ext. 47

Managing agency — Ministry of Health

General details — 1)From Feb 2) 180-200 3) 18Of, 12m 4)English 5) 4-5 students are accepted annually from South Pacific island territories.

Courses

* NURSING
3-year basic programme in general and maternity nursing.
At least 3 years post-primary education, preferably with School Certificate or equivalent in English and one other subject.

** MIDWIFERY
6-month post-basic course in midwifery, leading to Midwifery (Fiji) Certificate.
Basic certificate in general and maternity nursing, plus two years' post-basic experience in nursing practice.

** PUBLIC HEALTH
4-month post-basic courses in public health, leading to Certificate in Public Health Nursing.
Basic nursing certificate, plus at least two years' post-basic experience in the field of public health/maternal child care.

FIJ 3 UNIVERSITY OF THE SOUTH PACIFIC

Enquiries — Director of Planning and Development, University of the South Pacific, P.O. Box 1168, Suva. Tel: Suva 27131; telegram: University Suva.

Note — The University does not at present offer any courses or programmes in the area of health training either in Fiji or in any of the other countries it serves. However a request that the University be involved in the professional level programmes of the Fiji School of Medicine in both medicine and dentistry is under active consideration. It is possible that this will result in the qualifications concerned being awarded as external qualifications of the University.

The Gambia

The Gambia with an estimated population of 585,000, is administered through eight local government areas. The highest population densities are Banjul (3,229 per sq km in 1973) and Kambo St Mary (515 per sq km). The lowest is Lower River Division (26 per sq km).

The health services are administered by the Ministry of Health through a Permanent Secretary and with the Director Medical Services as the technical/professional head of the department. The department has an environmental health unit which includes in its functions mosquito control activities in Banjul.

Primary health care is delivered through health centres, maternity and child care clinics and dispensaries, some of which are privately run.

The national health plan for The Gambia (1975-1980) gives priority to the expansion of health services with particular emphasis on the rural areas. It is proposed by 1980 to establish six new health centres and six new dispensaries in areas which are under-provided. The plan also includes a rehabilitation programme to improve the existing centres and dispensaries, the strengthening of maternal and child welfare services, including immunization, nutrition education and family health, and for the training of personnel.

GAM 1 MANSA KONKO SCHOOL FOR COMMUNITY HEALTH NURSES

Enquiries: Senior Nursing Officer, Maternal and Child Health Medical and Health Department, Banjul.

Managing agency: Ministry of Health, Labour & Social Welfare.

General details: 1)Mar-Sep 2) 20pa 3)None 4)English 5)No students from other countries have so far been accepted.

Courses:

* COMMUNITY HEALTH/MIDWIFERY
18-month course in community health nursing and midwifery, leading to certificate of completion.
Junior secondary IV certificate, with ability to speak 2 of the local languages and to speak and write in English, with pass in school entrance exam; age 18+.

GAM 2 ROYAL VICTORIA HOSPITAL

Enquiries: Sister-in-charge, Enrolled Nurses Programme, c/o Royal Victoria Hospital, Banjul.

Managing agency: Ministry of Health, Labour & Social Welfare.

General details: 1)From Aug 2) 30 3)None 4)English 5)No students from other countries have so far been accepted.

Courses:

* NURSING
18-month course in general nursing, leading to qualification of State Enrolled Nurse, to provide assistance for direct patient care in hospitals and in the community.
Secondary/technical IV education, age 40 years and under.

GAM 3 **SCHOOL OF NURSING AND MIDWIFERY**

Enquiries Principal, School of Nursing and Midwifery, Marina Parade, Banjul. Tel: Banjul 673.

Managing agency Governors of Gambia College

General details 1)From Oct 2) 42pa 3) 3Of 4)English 5)One refugee student from Rhodesia is accepted annually.

Courses ** NURSING
3-year course in general nursing, leading to SRN, to provide nursing personnel for health services (see Note).
GCE 'O' level in 4 subjects or pass in School's entrance test; age 18+ and medically fit.

*** MIDWIFERY
1-year course in midwifery, leading to SCM.
General nursing certificate with at least 6 months esperience.

Note Preventive nursing care has been successfully integrated into the programmes thus producing a multipurpose nurse who can function effectively in a variety of health care delivery systems. The School receives some assistance from international agencies such as WHO and UNICEF.

GAM 4 **SCHOOL OF PUBLIC HEALTH**

Enquiries Principal, School of Public Health, 3 E Marina Parade, Banjul. Tel: Banjul 334/336.

Managing agency Ministry of Health, Labour and Social Welfare

General details 1)Jan-Apr, Apr-Aug, Aug-Dec 2) 24 3)None 4)English 5)No students from other countries have so far been accepted but this is not ruled out.

Courses ** PUBLIC HEALTH INSPECTION
3-year course in public health inspection leading to diploma of Royal Society of Health Inspectors, to provide staff for central and local government authorities.
GCE 'O' level in 5 subjects (at not more than two sittings) with English and at least one science subject.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Ghana

In Ghana, broad policies and guidelines for health services development are formulated at the central or national level. Planning of health programmes and projects within these broad policies and guidelines, taking special local problems into account, is done from the regional and district level.

It is recognized that the system of health care inherited from the colonial power and currently in use in the richer and developed countries is not necessarily appropriate to local conditions. There are, therefore, projects centred at Danfa Health Centre near Accra, being conducted by the University of Ghana Medical School in collaboration with the University of California, and in the Nkoranza/Techiman and Wenchi districts, being undertaken by the Ministry of Health in collatoration with WHO. These have the purpose of developing low-cost primary health care delivery systems most appropriate to local conditions in Ghana. Both projects are focused on the development of rural health care delivery systems that ensure maximum population coverage in general, and community participation in the solution of local health problems in particular.

The basic principles and techniques of community information and health education, as well as community organization, are used to motivate and secure community participation in health programmes. Almost every community in Ghana has a town or village development committee and a number also have health education committees. Where a health worker or an individual or group of people of influence take an interest in health and socio-economic development, there tends to be considerable motivation at local level, leading to the construction of clinics, latrines, schools, feeder roads, and so on.

Training programmes are being developed locally and expanded to promote the training of adequate numbers of the right type of personnel required for the effective and efficient delivery of primary health care. All categories of nurses, including nurse educators, are now trained in Ghana. Specialized post-basic nursing training programmes are also being developed. The population growth rate is higher than the economic growth rate, with relatively high infant and maternal mortality rates, so high priority is being given to the organization of services for women and children. The main objectives are: to strengthen maternal and child health services, including family planning, within the general health services; to reduce maternal and infant mortality - especially from preventable causes - to as low a level as possible; and to promote the proper growth and development of infants and children.

It is the national aim to shift the emphasis in health care from curative and hospital-oriented services to health promotions and protective services so as to arrive at a true and proper balance between them. From the progress so far made, there is considerable encouragement to hope that it will not be long before this problem is overcome.

GHA 1-32 **BASIC COURSES FOR NURSING PERSONNEL**

Enquiries To the Principal Nursing Tutor of individual institutions listed below.

Managing agency Government of Ghana unless otherwise indicated

Courses Courses of training similar to those outlined below (a-g) take place in a number of hospitals and training institutions throughout Ghana. Following this list of courses is a list of individual institutions (GHA 1-32), giving their location and an indication of which courses take place there. All courses are in English and most provide residential accommodation. Courses, except for g., are designed for Ghanaian nationals/residents and foreign students are not normally accepted, though this practice might be modified by decision of the Ministry of Health.

(a) * NURSING
2-year course for Enrolled Nurse certificate, covering anatomy and physiology, fundamentals of nursing theory and practical work, personal and community health, surgical and medical nursing.
Middle School Leaving Certificate, or 2-3 years secondary education; minimum age normally 17 or 18 years.

(b) * COMMUNITY HEALTH NURSING
2-year certificate course for community health nurse, covering identification of health problems, prevention of disease, treatment of minor ailments, maternal and child health services, immunization, home visits, hospital referrals and follow-up, leprosy and TB care, with emphasis on preventive health education at all levels.
As for Nursing course, above.

(c) ** NURSING
3-year course in general nursing, leading to certificate of State Registered Nurse. (Entry to this course is usually February and August.)
GCE 'O' level in 5 subjects including English and general science.

(d) ** MENTAL NURSING
2-year concentrated course in psychiatric nursing leading to certificate of Registered Mental Nurse. (Holders of SRN certificate may complete the course in 18 months.)
GCE "O" level in 3 subjects including English for QRMN serving officers.

(e) ** MIDWIFERY
2-year (post-basic) course in midwifery. (In some institutions QRNs may complete this course in 18 months.)
Qualified enrolled or community health nurses.

(f) *** MIDWIFERY
1-year (post-basic) course in midwifery.
State registered nurses.

(g) *** PUBLIC HEALTH NURSING
1-year course in public health nursing, open to students from all West African countries (total annual intake 43). See also GHA 37 for similar course.
Registered nurses with 5 years' post qualification practice.

GHA 1 **Community Health Nursing School, P.O. Box 351, Akim Oda.**
Courses (b)

GHA 2 **Community Health Nursing School, P.O. Box 72, Ho.**
Courses (b)

GHA 3 **Community Health Nursing School, P.O. Box 233, Tamale**
Courses (b)

GHA 4 **Enrolled Nursing School, Military Hospital, Accra.**
Managing agency Military
Courses (a)

GHA 5 **Enrolled Nursing School, St Dominic Hospital, Akwatia.**
Managing agency Mission
Courses (a)

GHA 6 **Enrolled Nursing School, Apam Hospital, Apam.**
Managing agency Mission
Courses (a)

GHA 7 **Enrolled Nursing School, Bawku Hospital, Box 43, Bawku.**
Courses (a)

GHA 8 Enrolled Nursing School, Holy Family Hospital, Box 21, Berekum.
Managing agency Mission
Courses (a)

GHA 9 Enrolled Nursing School, Bibiani Mines, Bibiani.
Managing agency Mines
Courses (a)

GHA 10 Enrolled Nursing School, Box 26, Bolgatanga.
Courses (a), (e).

GHA 11 Enrolled Nursing School, Kpandu Hospital, Box 97, Kpandu.
Managing agency Mission
Courses (a).

GHA 12 Enrolled Nursing School, St Patrick's Hospital, Box 17, Maase-Offinso
Managing agency Mission
Courses (a)

GHA 13 Enrolled Nursing School, Box 27, Kwahu, Mpraeso.
Courses (a), (e).

GHA 14 Enrolled Nursing School, Ariston Gold Mines Hospital, Prestea
Managing agency Mines
Courses (a)

GHA 15 Enrolled Nursing School, Aba Hospital, Tarkwa
Managing agency Mines
Courses (a)

GHA 16 Enrolled Nursing School, Box 16, Worawora.
Courses (a)

GHA 17 Mental Nursing Training School, Box 1305, Accra.
Courses (d)

GHA 18 Mental Nursing Training School, Ankaful Mental Hospital, Box 412, Ankaful
Courses (d)

GHA 19 Midwifery Training School, P.O. Box 81, Accra
Courses (e), (f)

GHA 20 Midwifery Training School, P.O. Box 27, Hohoe Hospital, Hohoe (VR)
Courses (e), (f)

GHA 21 Midwifery Training School, P.O. Box 142, Koforidua
Courses (e), (f)

GHA 22 Midwifery Training School, P.O. Box 34, Mampong, (Ashanti)
Courses (e), (f)

GHA 23 Nursing Training College, Box 84, Korle Bu Hospital, Accra
Courses (a), (c), (e), (f)

GHA 24 Nursing Training College, Box 27, Agogo
Managing agency Mission
Courses (c)

GHA 25 Nursing Training College, P.O. Box 3, Jirapa
Managing agency Mission
Courses (a), (e)

GHA 26 Nursing Training College, Box 110, Kumasi
Courses (a), (c), (e), (f)

GHA 27 Nursing Training College, P.O. Box 333, Sekondi (WR)
Courses (c)

GHA 28 **Nursing Training College, Box 565, Tamale**
Courses (a), (c)

GHA 29 **Nursing Training School, Ridge Hospital, Accra**
Courses (a)

GHA 30 **Nurses Training School, Box 142, Koforidua**
Courses (a)

GHA 31 **Nurses Training School, Box 14, Tema**
Courses (a)

GHA 32 **School of Public Health Nursing, Korle Bu, Accra**
Courses (g)

GHA 33 **ACCRA POLYTECHNIC**

Enquiries Principal, Accra Polytechnic, P.O. Box 561, Accra.

Managing agency Ministry of Health

General details 1)Oct-Jun 2) 20 3)None 4)English 5)No students from other countries have been accepted so far but this is not ruled out.

Courses * DISPENSING
1-year preliminary course for dispensing technicians, to qualify candidates for entry to a 3-year technician course at Kumasi Polytechnic.
Middle School Leaving Certificate, serving dispensing assistant. Candidates are sponsored by the Ministry of Health after being selected from serving dispensing assistants in various hospitals.

GHA 34 **DENTAL ASSISTANT TRAINING SCHOOL**

Enquiries The Head, Dental Assistant Training School, Box 473, Accra.

Managing agency Ministry of Health

General details 3)None 4)English 5)No students from other countries have so far been accepted.

Courses * DENTAL ASSISTANT
Courses of training for dental clinic assistants.
Middle School Leaving Certificate.

GHA 35 **GHANA INSTITUTE OF MANAGEMENT AND PUBLIC ADMINISTRATION**

Enquiries Director, Ghana Institute of Management and Public Administration, P.O. Box 50, Achimota. Tel: 77625/6/7; telegram: GIMPA Achimota

Managing agency Government of Ghana

General details 1)Oct-Dec, Jan-Mar, Apr-Jun 2) 360 3)Yes 4)English 5)About 3 students are accepted annually from other countries, including Gambia and Sierra Leone.

Courses **** HEALTH ADMINISTRATION
8-week course in health administration and management for senior doctors (WAHS), to enhance knowledge, understanding and application of modern management concepts and techniques.
Medically qualified senior personnel.

(Continued)

Note — This special course in health administration and management is run in collaboration with the West African Health Secretariat with support from the Commonwealth Secretariat.

GHA 36 **KUMASI POLYTECHNIC**

Enquiries — Principal, Kumasi Polytechnic, Kumasi.

Managing agency — Ministry of Health

General details — 1)Oct-Jun 2) 30 3)Some 4)English 5)No students from other countries have so far been accepted but this is not ruled out.

Courses

** DISPENSING
3-year course for dispensing technician (pharmacy).
GCE 'O' level/MSLC with 1-year preliminary course (Accra Polytechnic).

GHA 37 **RURAL HEALTH TRAINING SCHOOL**

Enquiries — Principal, Rural Health Training School, P.O. Box 9, Kintampo, B/A.

Managing agency — Ministry of Health

General details — 1)Oct-Jun (field work: Jul-Sep) 2) 131 3) 93m & 38f 4)English 5)Up to 10 foreign students may be accepted annually.

Courses

* EPIDEMIOLOGY
2-year certificate course in epidemiology for field technicians.
Middle School Leaving Certificate, preferably with some experience in epidemiological services; no age limit.

** EPIDEMIOLOGY
3-year certificate course in epidemiology for technical officer (medical field unit).
School Certificate 'O' level with five passes including science subjects and English; experience with epidemiology services an advantage.

** NUTRITION
3-year certificate course in nutrition, for technical officer for nutrition rehabilitation, extension work and field research.
School Certificate 'O' level with passes in science subjects and English.

*** PUBLIC HEALTH NURSING
1-year certificate course for health centre superintendent (medical assistants).
Registered nurses with 5 years' post qualification practice.

GHA 38 **SCHOOL OF MEDICAL LABORATORY TECHNOLOGY**

Enquiries — Principal, School of Medical Laboratory Technology, P.O. Box 300, Korle-Bu, Accra. Tel: 65401 ext. 408 & 409.

Managing agency — Health Laboratory Services, Ministry of Health

General details — 1)From mid-Jan 2) 90 + 20 on short course 3) 80m & 10f 4)English 5) 4 students from other countries are currently accepted annually - from Liberia and St. Helena.

Relevant departments: Bacteriology - Haematology - Blood bank - Biochemistry - Parasitology - Histology

Courses:

* LABORATORY TECHNOLOGY
6-month course of training for laboratory assistants, leading to certificate.
Elementary school leaving certificate or attepted School Certificate or GCE. Must have worked in a laboratory for at least 2 years.

** MEDICAL LABORATORY TECHNOLOGY
3-year technician training course in medical laboratory technology, leading to Technical Officers Certificate (Lab.) intermediate standard.
GCE or West African School Leaving Certificate, with passes in 2 science subjects, elementary maths, and English language.

Note: Most subjects are taught by part-time tutors from the Ghana Medical School. Negotiations are underway for the school to be more closely associated with the Ghana Medical School, so that a further, higher course for technologists may be introduced. Students currently spend a large part of their course in the laboratories of the Korle-Bu Teaching Hospital.

GHA 39 SCHOOLS OF HYGIENE

Enquiries: The Head, School of Hygiene, Korle Bu, Accra; *or* School of Hygiene, Ho; *or* School of Hygiene, P.O. Box 88, Tamale

Managing agency: Ministry of Health

General details: 1)Oct-Jun 2)Korle Bu 170; Ho 50; Tamale 50 3)Some 4)English 5) 3 foreign students have been accepted at Korle Bu.

Courses:

* PUBLIC HEALTH INSPECTION
2-year course for assistant (rural) health inspector, comprising academic course and practical demonstrations on all aspects of theory. This course takes place at Ho and Tamale.
Middle School Leaving Certificate (3 continuous academic years at secondary school).

** PUBLIC HEALTH INSPECTION
3-year course for public health inspector. This course takes place at Korle Bu School of Hygiene.
GCE 'O' level.

GHA 40 UNIVERSITY OF GHANA

Enquiries: To relevant department/school, as follows:
Acting Head, Department of Nursing, University of Ghana, Legon.
Tel: 75381 ext. 8941; telegram: University Legon.
Principal, Department of Nutrition & Food Science, University of Ghana, P.O. Box 134, Legon.
Director, School of Administration, University of Ghana, P.O. Box 78, Legon. Tel: 76591.
Dean, University of Ghana Medical School, P.O. Box 4236, Accra.

General details: 1)From Oct 2)c.2835 3)Yes 4)English 5)Students from other countries are accepted - mainly fron neighbouring countries, UK and USA.

Courses:

*** NURSING ADMINISTRATION
1-year post-basic certificate course in nursing administration.
State registered nurses.

*** NURSING EDUCATION
2-year diploma courses in nursing education and in nursing service education, to prepare nurses for teaching positions in schools of nursing, midwifery, psychiatry and public health nursing, or administration and supervision in hospitals and public health agencies.
State registered nurses with at least 3 years' standing, and pass at entrance examination.

*** FIRST DEGREES
3 years for first degrees in nutrition, nutrition and food science, and hospital administration; 3-4 years for BA or BSc in nursing; 5½ years for dentistry and medicine.
Generally, GCE in 5 subjects, including 3 at 'A' level. English is obligatory and certain other subject requirements depend on course taken. Candidates for hospital administration and nutrition preferably to have some experience in the field.

**** MASTER'S LEVEL
1-2 year master's level courses in medicine, surgery, obstetrics & gynaecology, child health, pathology and nutrition.
Appropriate first degree.

Note

There is a proposal to expand the School of Administration programme in hospital administration into a regional or sub-regional programme for training health services administrators for Anglophone African countries, with the 1979/80 academic year; it is expected that the expanded programme will have financial support and sponsorship from agencies such as the Commonwealth Secretariat, WHO and CIDA. Two additional courses would be offered under the regional programme: a 1-year postgraduate diploma in health services administration for about ten candidates with suitable university degrees; and a 3-year diploma course in health services administration for about 30 candidates of GCE level and at least 3 years working experience in the health services.

GHA 41 UNIVERSITY OF SCIENCE AND TECHNOLOGY, SCHOOL OF MEDICAL SCIENCES

Enquiries

Dean/Secretary, School of Medical Sciences, U.S.T., Kumasi. Telegram: School of Medical Sciences, Kumasitech

Managing agency

National Council for Higher Education

General details

1)Oct (see Note) 2) 116 (in School of Medical Sciences) 3) 2378m 309f 4)English 5) 2 students from other countries have been accepted each year so far (eg The Gambia, Lesotho, Netherlands, Nigeria). There is no fixed intake.

Departments

Anatomy - Physiology - Biochemistry - Pathology - Pharmacology - Microbiology - Medicine - Surgery - Community health - Obstetrics and gynaecology - Anaesthesia - Child health - Chemical pathology - Haematology - Immunology.

Courses

*** FIRST DEGREE
3 years in human biology for BSc (Human Biology).
GCE 'A' levels either in chemistry, biology and physics, with 'O' level in mathematics; or 'A' level in chemistry, mathematics and physics, with 'O' level in biology.

**** HIGHER DEGREES
3 years after BSc (Human Biology) for MB and ChB; 2 years for MSc in health sciences; 4 years for PhD in health sciences (see Note).
Minimum entry BSc (Human Biology) or equivalent.

**** DIPLOMA
1 year after BSc (Human Biology) for diploma in health technologies (see Note).
As above.

Note — From the 1978/79 academic year (which commenced exceptionally in January 1979), the university had adopted the semester modular system of three semesters, each of 16 weeks, with no long vacation. The normal arrangement will be: 1st semester Oct-Jan; 2nd Feb-May; 3rd Jun-Sept. The School of Medical Sciences was established in October, 1975. Students are expected to follow the BSc (Human Biology) course and then to branch to one of the higher specializations listed above. For the present, owing to lack of facilities, only the MB or ChB is available.

GHA 42 — **WEIJA TRAINING SCHOOL**

Enquiries — The Head, Weija Training School, Weija Water Supply & Sewerage, Weija, Accra.

Managing agency — Ministry of Health.

General details — 3)None 4)English 5)No students from other countries have so far been accepted.

Courses — * WATER SUPPLY & SEWERAGE
Courses of training for water supply and sewerage operators.
Middle School Leaving Certificate

GHA 43 — **X-RAY TRAINING SCHOOL, KORLE BU HOSPITAL**

Enquiries — Training Officer (Radiography), X-Ray Training School, K-Ray Department, P.O. Box 297, Korle Bu Teaching Hospital, Accra. Tel: 65401 ext. 498 & 454.

Managing agency — Ministry of Health

General details — 1)Jun-Oct, Jan-Jun 2) 19 3) 10m & 2f 4)English 5)No students from other countries have so far been accepted but this is not ruled out.

Courses — ** X-RAY OPERATING (RADIOGRAPHY)
3-year course for X-ray operators (radiography) covering anatomy and physiology, radiography technique, care of patients, department procedure, radiography photography, physics, equipment, radiation protection.
GCE 'O' level in 5 subjects including English, maths and science; or in 4 subjects including one at 'A' level.

Gibraltar

There is a comprehensive range of primary health care services in Gibraltar. At the Health Centre there is a government-run group practice medical scheme employing six general practitioners, each on a retainers' salary. A charge of 20 pence is made to each patient attending the centre. Medicines prescribed under this service are paid for by the government, with a contribution of 20 pence from the patient. There are two general practitioners engaged in private practice.

Ante-natal and maternity care is supplied by government clinics. The private practitioners also provide similar care in the early stages of pregnancy, after which cases are invariably referred to the ante-natal and maternity clinics. Child welfare clinics are run for the purposes of checking young childrens' progress and advising mothers on baby feeding and care.

The government also offers immunization against smallpox, diphtheria, tetanus, pertussis, measles and polio free of charge to all children up to the age of 16. All children are medically examined at least twice during their years at school. These examinations include deaf tests as well as dental and ophthalmic checks.

GIB 1

Nurses are trained as State Registered Nurses at St Bernards School of Nursing. There are no other medical or health training facilities in Gibraltar.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Grenada

The Ministry of Health in Grenada takes a full part in programmes of a regional nature for example the strategy and plan of action to combat gastro-enteritis and malnutrition of 1973, and the maternal and child health strategy for the Caribbean Community 1976 - and have gone some way towards their full implementation. The Ministry has also established its own priorities in the scheduling of programmes, training and objectives in the delivery of primary health care.

Emphasis is given to maternity and child health programmes. Professional advice on nutrition, breast-feeding, anti-, pre- and post-natal care is available at the hospitals, at weekly clinics, at the five health centres and 33 visiting stations. In addition there is a special maternity delivery unit at Gouyave, which is of particular interest in the development of low cost maternity services. The special features of this unit are: average length of stay after delivery is 24 hours, on discharge patients are visited for at least eight days during the lying in period by the district/nurse midwife, admission is free and voluntary, mothers are given full instruction on post-natal care of themselves and their babies. The unit incorporates all the facilities needed to meet international standards of health care.

Other programmes whose major functions is to promote health and foster the development of an effective surveillance programme include programmes for communicable diseases, rabies control, mental health, health education, dental health, and environmental control. A mass immunization programme was carried out in 1978 and was scheduled to be completed in 1979.

As an active part of the policy to promote better health, a Food Nutrition Council will be established, which will have representatives from the various ministries and the private sector. Personnel from the Ministry of Health collaborate with other ministries in education and community development through the National Child Care Committee, and in environmental control through, for example, the Hurricane Committee which is based on the Ministry of Communication and Works.

GRE 1 **GRENADA SCHOOL OF NURSING**

Enquiries — Director, School of Nursing, General Hospital, St George's.

Managing agency — Ministry of Health

General details — 1)Varies 2) 110 3) 60f 4)English 5)No students from other countries have as yet been accepted, but this is not ruled out.

Courses

** NURSING
3-year course in general nursing, for registered nurse.
GCE 'O' level in at least 4 subjects including English and a science.

*** MIDWIFERY
1-year course in midwifery.
Qualified registered nurses.

Note — The School of Nursing also provides training for nursing assistants over a short period.

GRE 2 MINISTRY OF HEALTH, ST GEORGE'S

Courses

** PARAMEDICALS
On the job training is given by the Ministry of Health in the following: pharmacy/dispensing, environmental health, medical laboratory technology, health education (health aides). Suitably qualified candidates are given additional training at regional institutions in other countries of the Caribbean.
GCE 'O' level in at least four subjects including English language and science.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Guyana

Primary health care in Guyana is the major concern of two categories of workers; the community health worker (formerly called medical ranger), and the medex (formerly called the sicknurse/dispenser).

The community health worker is a man or woman who can read, write and demonstrate a concern for problems faced by people. He or she will be selected by the regional authorities and/or the local community authorities and will be expected to deal with the health problems of individual people and the community. As far as is possible, training is of a practical nature and given within the community. The trained community health worker will therefore be able to provide basic preventive and curative services which need not be provided by other health workers trained to function at a higher level. He or she will be operating from a medical outpost and will be under the direct supervision of the medex.

The medex operates from the health centre and has been trained to:

- advise on the promotion of health;
- advise on the prevention of diseases;
- diagnose (using diagnostic protocols) certain common ailments;
- manage specific illnesses in accordance with written protocols;
- recognize problems which are beyond his capability either to diagnose and to manage, and refer these to his supervising officer;
- administer pre-natal care, perform normal deliveries and recognize abnormalities which need referral;
- administer post-natal care and advise on routine child care in its many aspects.

Simple medical problems are handled at the medical outpost which facility is located in the rural and remote hinterland areas. As the problems become more complex they are referred to the health centre via the health station. Problems which cannot be handled at the health centre are referred to the district hospital and ultimately to the referral/teaching hospital if necessary.

GUY 1 **DENTAL AUXILIARY TRAINING SCHOOL**

Enquiries: Principal, Dental Auxiliary Training School, Thomas & Murray Street, Greater Georgetown. Tel: 02-71852

Managing agency: Ministry of Health

General details: 1)Jan-Apr, May-Aug, Sep-Dec. 2) 20 3)None 4)English 5)No students from other countries have so far been accepted, but this is not ruled out.

Relevant departments: Dental clinical - Pre-clinical - Bio-medical - Clinical practice.

Course: ** DENTAL NURSING
2-year dental nurse training programme, covering dental health education, preventive treatment and restorative dentistry, and leading to Certificate of Competence; mainly to provide dental service to schools.
GCE 'O' level in 4 subjects, age 18+.

GUY 2 **GEORGETOWN HOSPITAL, DEPARTMENT OF PHYSIOTHERAPY**

Enquiries: The Principal Physiotherapist, Georgetown Hospital, Georgetown.

Managing agency: Ministry of Health

General details 1)In 3 terms 2) 10 per head 3)None 4)English 5)No students from other countries have been accepted so far (see Note).

Course ** PHYSIOTHERAPY
2-year course in physiotherapy, leading to Certificate of Competence, to train staff for the expanding rehabilitation services, mainly in outlying areas.
GCE 'O' level in English and a science subject.

Note This is a pilot programme so no foreign students have so far been accepted, but it is envisaged that it could be available to other Caribbean students in the near future. See also GUY 3 and 4.

GUY 3 GEORGETOWN HOSPITAL, SCHOOL OF NURSING

Enquiries Principal Tutor, Georgetown Hospital School of Nursing, East Street, Cummingsburg, Georgetown.

Managing agency Ministry of Health

General details 1)From Feb & Sep 2)c.548 3)None 4)English 5)Students have been accepted from St. Lucia, Dominica and USA.

Courses ** NURSING/MIDWIFERY
2-year course for nursing assistant, to prepare staff to perform technical nursing skills under supervision; also, 2-year course in basic midwifery.
GCE 'O' level in two subjects or Community High School Diploma, plus satisfactory performance in aptitude test.

** NURSING/MIDWIFERY
3-year course for professional nurses. This may be followed by a further course in midwifery.
GCE 'O' level in four subjects, plus satisfactory performance in aptitude test; or qualified nursing assistants with post qualification experience. Age 17-35, though mature students are considered.

Note See also GUY 2 and 4.

GUY 4 GEORGETOWN HOSPITAL, X-RAY DEPARTMENT

Enquiries Principal Radiographer, X-Ray Department, Georgetwon Hospital, Georgetown. Tel: 02-63760

Managing agency Ministry of Health

General details 1)Varies 2) 6 3)None 4)English 5)A student from Anguilla was accepted in 1976.

Course ** X-RAY TECHNIQUES
12-month course in X-ray techniques, to train technicians to carry out routine and some special X-ray examinations. There are practical 'on the job' sessions and formal lectures with emphasis on anatomy, radiographic photography and radiographic techniques.
GCE 'O' level in English, maths and a science subject, age normally 28-40. Persons without the academic entry qualifications but who have been carrying out duties of an X-ray technician for at least a year may be eligible.

Note This category of worker is being trained to manage small X-ray departments in outstations with or without direct supervision, and as assistants to radiographers in larger departments. The course started in 1975. See also GUY 2.and 3.

GUY 5 **McKENZIE HOSPITAL SCHOOL OF NURSING**

Enquiries — Director of Nursing Education, McKenzie Hospital School of Nursing, Linden.

Managing agency — Guymine, Linden, with Ministry of Health

General details — 1)Twice annually 2) 40 3)None 4)English

Courses

** MIDWIFERY
2-year course in basic midwifery
GCE 'O' level in two subjects.

** NURSING/MIDWIFERY
3-year basic course for professional nurses. This may be followed by 1-year course in midwifery.
GCE 'O' level in four subjects.

*** NURSING/NURSE TEACHING
1-year part-time plus 1-year full-time for Bachelor of Education (University of Guyana) with a major in Nursing.
Registered nurse or midwife, Certificate in Advanced Nursing Education, or Tutor's Diploma, or equivalent.

GUY 6 **MINISTRY OF HEALTH TRAINING COURSES**

Enquiries — Respectively to: Principal Medical Officer, or Principal Nursing Officer, Ministry of Health, Brickdam, Georgetown; Project Director, Medex-Guyana, Ministry of Health, Housing and Labour, Liliendaal, Greater Georgetown.

General details — 1)Varies 2) 20 public health inspection, 25 nursing, 25 Medex. 3)None 4)English 5)Students from Commonwealth Caribbean countries are accepted only on the nursing programme at present.

Courses

** PUBLIC HEALTH INSPECTION
2-year diploma course for public health inspectors.
GCE 'O' level with five passes including English language.

*** MEAT & OTHER FOODS INSPECTION
1-year post basic certificate course in meat and other foods inspection.
Diploma of Public Health Inspector or equivalent.

*** PUBLIC HEALTH NURSING
1-year post basic course in public health nursing, covering mental health, maternal and child care, psychology, social structure, health statistics, communicable diseases, prevention and control, environmental sanitation, and leading to Certificate for Health Visitors and School Nurses from the Royal Society for the Promotion of Health.
Graduate nurses or midwives with post qualification experience.

*** MEDEX/MEDICAL AUXILIARY
12-15 month medex training programme, to train staff for the provision and improvement of health services in rural and hinterland area. The course includes diagnosis of common ailments and their management, prevention of disease, pre-natal care, normal deliveries, post-natal care, child care, dental problems, laboratory procedures.
Registered nurses or midwives, registered sicknurse dispensers, or candidates otherwise considered suitable.

(Continued)

Note — The medex training programme is certified by the University of Guyana (see GUY 9) and has links with the Health Manpower Development Staff, John A Burns School of Medicine, University of Hawaii. It receives support from the International Development Research Centre, Ottowa. It is hoped that the public health inspection programmes will shortly be leading to the award of certificates and diplomas of the University of Guyana also.

GUY 7 NEW AMSTERDAM SCHOOL OF NURSING

Enquiries — Senior Tutor, New Amsterdam School of Nursing, New Amsterdam, Berbice.

Managing agency — Ministry of Health

General details — 1)From Feb & Sep 2) 200 3)None 4)English 5)Students from other Caribbean countries have been accepted.

Courses — As for Georgetown Hospital School of Nursing, GUY 3.

GUY 8 ST JOSEPH'S MERCY HOSPITAL SCHOOL OF NURSING

Enquiries — Director of Nursing Education, St Joseph's Mercy Hospital School of Nursing, Barrack Street, Kingston, Goergetown.

General details — 1)From Jan 2) 20 3)None 4)English

Course — ** NURSING
3-year basic course in professional nursing.
GCE 'O' level in 4 subjects.

GUY 9 UNIVERSITY OF GUYANA

Enquiries — Registrar, University of Guyana, Box 841, Georgetown. Tel: 69201-6; Telegram: Uniguy, Georgetown.

General details — 1)Sep-Jun in 3 terms 2) 29 3)None 4)English 5)About 15 students accepted annually from other Commonwealth Caribbean countries.

Relevant departments — Department of Health Science, Faculty of Natural Sciences, Faculty of Education.

Courses — ** MEDICAL TECHNOLOGY
2-year certificate course in medical technology, to provide medical laboratory staff.
Five GCE 'O' levels, including English, biology or chemistry, or physics with chemistry; age at least 17 years.

** PHARMACY
3-year diploma course in pharmacy, for in-service candidates at government pharmacy or pharmaceutical department of a government hospital.
GCE 'O' level in English, biology, pure maths, chemistry and one other subject; age at least 18 years. See note below.

*** CHEMICAL PATHOLOGY
1-year course leading to diploma in chemical pathology, for in-service government medical laboratory staff.
Certificate in Medical Technology or equivalent, plus two years' practical post-certificate experience at a recognised medical laboratory.

*** MICROBIOLOGY
1-year course leading to diploma in microbiology, for government medical laboratory staff.
Certificate in Medical Technology or equivalent, plus one year's practical post-certificate experience at a recognised medical laboratory.

Note

The pharmacy programme is offered in collaboration with the Ministry of Health and candidates must serve the Guyana Government for five years on successful completion of the programme. Courses leading to a Diploma in Radiography and a Medex Certificate (see GUY 7) are run by the Ministry of Health but certified by the University of Guyana. A similar arrangement exists with PAHO/WHO for a Health Sciences Tutors Certificate (see BAR 3).

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Hong Kong

The Medical and Health Department is responsible for promoting the general public health of the community as a whole and ensuring the provision of medical and personal health facilities for the people of Hong Kong.

There are 52 government outpatient clinics in various parts of Hong Kong, Kowloon and the New Territories. A standard clinic consists of a general outpatient department and a family health centre, with or without a maternity ward depending on the needs of the area.

In the more populous areas, polyclinics or specialist clinics are built which provide specialist clinic sessions besides general outpatient services. Evening outpatient clinics are also held in the more densely populated areas.

Villagers in the remote areas of the New Territories are served by mobile dispensaries, and islanders are visited by 'floating clinics'. Helicopters provide a 'flying doctor' service to the more isolated and inaccessible communities and cases requiring urgent hospital treatment are evacuated by helicopter if necessary.

Treatment at a government clinic costs HK$1 a visit, including medicine as well as X-ray examinations, laboratory tests, etc. No charge is made for patients attending venereal diseases, tuberculosis, leprosy, and maternal and child health clinics.

The Government has set out a 10-year development programme for the further development of Medical and Health Services in Hong Kong. Included in the programme will be the construction of clinics and polyclinics in new towns and in the centres of population to meet the increase in demand.

HOK 1 **HONG KONG POLYTECHNIC**

Enquiries: The Director, Hong Kong Polytechnic, Yuk Choi Road, Hung Hom, Kowloon. Tel: 3-638344

General details: 1)Oct-Jan, Feb-Jun 2) 5,715 full-time 3)None 4)English 5) 10 full-time and 6 part-time students from other countries were accepted in 1977/78.

Courses:

** MEDICAL LABORATORY SCIENCE
2-year diploma course in medical laboratory science.
Hong Kong Certificate of Education with Grade C or above in at least five subjects, including English, two relevant science subjects and maths, or equivalent.

** OCCUPATIONAL THERAPY
3-year higher diploma course in occupational therapy.
HK Certificate of Education as above, but including English and biology. Preference to candidates offering a biological science at 'A' level.

** PHYSIOTHERAPY
3-year higher diploma course in physiotherapy.
As for Occupational therapy course, above.

** RADIOGRAPHY
3-year higher diploma course in radiography.
HK Certificate of Education as above, but including English, biology, physics, and mathematics. Preference to candidates offering maths or physics at 'A' level.

Note: The above courses are provided in the Polytechnic's newly-established Institute of Medical and Health Care, which also offers a part-time day release course in ophthalmic optics (where the major medium of

instruction is Cantonese). A new development at the Polytechnic is the setting up of a Dental Technology Section in the Department of Applied Science. This will work closely with the University of Hong Kong to offer a new diploma course in dental technology in the academic year 1978/79.

HOK 2 **MEDICAL AND HEALTH DEPARTMENT**

Enquiries: Director of Medical and Health Services, Medical and Health Department, Lee Gardens, Hysan Avenue, Hong Kong.

General details: 1)Not fixed 2)c.1300 3) 1535f & 207m 4)English 5)No students from other countries have as yet been accepted, as the main purpose of the department is to provide services for the community, and training places are limited.

Courses:

*/** NURSING
2-year certificate course for Enrolled Nurse (General & Psychiatric) and 3-year certificate course for Registered Nurse (General & Psychiatric).
Successful completion of Form IV or Middle IV for Enrolled Nurse, and HK Certificate of Education for Registered Nurse.

** DENTAL CARE
3-year certificate courses for dental hygienist and for dental therapist, to provide staff for the School Dental Care Service Scheme.
HK Certificate of Education, age 18-26 years.

** DENTAL TECHNOLOGY
3-year certificate course for dental technician, to provide laboratory staff.
HK Certificate of Education, age 18-26 years.

** DISPENSING
3-year certificate course for dispenser.
HK Certificate of Education, age 18-26 years.

** PROSTHETICS
3-year certificate course for prosthetist.
HK Certificate of Education, age 18-26 years.

*** PUBLIC HEALTH NURSING
9-month certificate course in public health nursing.
Registered nurses with midwifery qualification.

Note: The Hong Kong Polytechnic (see HOK 1) will assume responsibility for the training of student physiotherapist, occupational therapist, radiographers and medical laboratory technicians starting from September 1978. The Medical and Health Department will continue to undertake clinical and practical aspects of training of the paramedical staff.

HOK 3 **UNIVERSITY OF HONG KONG**

Enquiries: Registrar, University of Hong Kong, Pokfulam Road, Hong Kong.
Tel: 5-468161; telegrams: University, Hong Kong.

General details: 1)Oct-May/Jun in 3 terms 2) 4,839 3) 439m, 211f 4)English 5)About 105 students are accepted annually from other countries.

Relevant department: Anatomy - Biochemistry - Community medicine - Medicine - Microbiology - Obstetrics & gynaecology - Orthopaedic surgery - Paediatrics - Pathology - Pharmacology - Physics - Physiology - Psychiatry - Psychology - Surgery.

*** MEDICAL LABORATORY TECHNOLOGY
2-years (part-time) ordinary certificate course in medical laboratory technology; 2-year (part-time) higher certificate course in medical laboratory technology.
For ordinary certificate: GCE 'O' level in English, maths, chemistry and one other science, plus one year's laboratory experience, and preferably sponsored by employer; for higher certificate, ordinary certificate in MLT or GCE 'A' level in chemistry plus another science, and two years' approved laboratory experience, with sponsorship of employer.

*** FIRST DEGREES
4-year first degree course for dental surgery; five years for medicine and surgery (recognized by GMC (UK)). See note.
GCE 'A' level in physics, chemistry and a third subject, preferably biology or zoology.

Note — The Bachelor of Dental Surgery course will be offered for the first time in 1980.

HOK 4 URBAN SERVICES DEPARTMENT

Enquiries — Superintendent, Training and Health Education Section, Urban Services Department, 12th Floor, Central Government Offices Building, Ice House Street, Hong Kong.

Managing agency — Government of Hong Kong

General details — 1)Varies 2) 100-150 3)None 4)English 5)Students from other countries are not accepted.

Courses

** PUBLIC HEALTH INSPECTION
2-year basic health inspector training course, leading to Royal Society of Health Diploma in Public Health Inspection for Overseas Appointment.
GCE 'O' level in English, maths and one science subject; age normally 17-25.

*** MEAT AND FOODS INSPECTION
8-month course in meat and other foods inspection, for health inspectors and leading to Royal Society of Health Diploma in Meat and Other Foods Inspection for Health Inspectors.
Qualified health inspectors with minimum of one year's working experience.

Note — All student/trainee health inspectors are government staff and these diplomas are the statutory qualifications for these respective inspection duties. For the promotion of solid wastes disposal, the Training and Health Education Section has cooperated with the Hong Kong Polytechnic (see HOK 1) in running 3-year part-time day release courses leading to the relevant diploma for qualified health inspectors.

India

To provide preventive, curative and promotive medical and health services to the rural population of India, which is approximately 80 per cent of the total population, primary health centres have been established. These also have another important function, which is to bring about a change in health behaviour of the people through community participation. Primary health centres and sub-centres have the support of the network of the health care delivery system provided through district and sub-divisional hospitals. At the State level there are teaching hospitals and other big hospitals. For every 60,000 to 80,000 people there is one primary health centre and one sub-centre for approximately 10,000 people.

In all the big hospitals there are social service departments based on the principle of voluntary participation of the people for the welfare of the patients. In the teaching hospitals, departments of preventive and social medicine are actively involved in the planning and implementation of training of interns in community medicine in rural areas. Each medical college has been assigned the responsibility of providing medical and health services to three primary health centres in neighbouring districts.

The success of any programme depends considerably upon the training of the various categories of personnel involved in the programme. A training strategy has therefore been developed so that all the categories of personnel are trained in the shortest possible period of time. For this purpose a network of training institutes has been established. There are seven central training institutes and 46 regional health and family welfare training centres to train workers right from primary health centre and sub-centre levels to State level. Besides the in-service training programmes, which are followed by refresher and re-orientation courses, a one-year diploma course in health education is being organized by three central institutes in collaboration with local universities. Increased emphasis on the health education component in basic training courses for medical, nursing and other paramedical staff is being given. Attention is also being given to the incorporation of health education in general education at various levels in schools and colleges.

In 1977 the Ministry of Health and Family Welfare introduced a new health policy in which the major emphasis is on people's participation. Under the rural health services scheme, each village will select its own community health worker (CHW), on the basis of one CHW for every 1,000 people. The role of CHW, who belongs to the community and enjoys its confidence, is to provide on-the-spot primary medical care and at the same time to educate the community on the prevention of diseases and the promotive aspects of health. The CHWs act as the link between the community and the health agency. They are not government servants; they are voluntary workers responsible to the village council. In the first stage, district health officers and medical officers of 750 primary health centres are undergoing training so as to equip them to undertake the training of community health workers.

In the first stage, district health officers and medical officers of 750 primary health centres are undergoing training so as to equip them to undertake the training of community health workers.

At the same time a new category of health assistant, the multi-purpose health worker (MPW) has been introduced. The MPWs work in pairs, one male and one female, to provide an integrated health service in rural areas. MPWs are supervised by health assistants, again in pairs, who in addition to the supervisory role, carry out the functions of health workers in their own areas.

Thus there is a great change taking place in India in the primary health care system. It is becoming more and more community oriented with the emphasis on providing education in health promotion and prevention as well as better health care services.

GENERAL NOTE

While every effort has been made to obtain up-to-date information on medical and paramedical training facilities in India, it has not been possible to cover every institution. For some of these, the relevant details have been obtained from *Education and Training Resources of the Developing Countries of the Commonwealth* published by the Commonwealth Secretariat in October, 1977. They are identified by 'ETR-77' at the end of the entry.

Medical colleges — Most medical colleges in India are affiliated to or otherwise associated with universities. although the managing agency is often the State Government. Where detailed information was available, entries have been included for individual colleges. In most other instances the names of the medical colleges have been listed under the universities with which they are associated.

Entry for first degree — Entry requirements for first degree courses have not in all cases been included. In general the pattern of education in India is 10 years of schooling, then one or two 'preparatory' years followed by two, three or up to five years in the case of professions (such as medicine) for a first degree.

IND 1 **AGRA UNIVERSITY**

Associated institutions — **Agra Medical College, Agra**
Institute of Household Art and Home Science, Agra

Enquiries — Registrar, Agra University, Agra, Uttar Pradesh, 282004. Tel: 72748; telegram: AGRA UNIVERSITY

General details — 1)Jul-Apr in 2 terms 2)c.64,000 3) 30 4)English and Hindi (either for any course) 5)Students from other countries are accepted.

Relevant faculties — Medicine - Science

Relevant departments — No university departments; all teaching done through affiliated colleges.

Courses — *** FIRST DEGREES
2 years in home science: 4½ years in medicine and surgery.

**** MASTER'S LEVEL
1-year courses in home science.

**** DOCTORAL STUDIES
PhD in faculties of medicine and science requires 3 years after master's degree; DSc 2 years after PhD, or 5 years after master's.

**** DIPLOMA
1-year postgraduate Diploma courses taken after 1-year recognized internship in anaesthesiology, child health, clinical pathology, embryology, gynaecology and obstetrics, medical radiology and electrology, ophthalmic medicine and surgery, orthopaedics, oto-rhinolaryngology, psychological medicine, tuberculosis and chest diseases, venereal diseases.

Note — Founded in 1927, Agra University consists of 41 affiliated colleges which provide undergraduate and postgraduate instruction, and a number of institutes. ETR-77

IND 2 **ALIGARH MUSLIM UNIVERSITY**

Associated institutions
Institute of Ophthalmology
Jawahar Lal Nehru Medical College

Enquiries
Registrar, Aligarh Muslim University, Aligarh-202001, U.P.

General details
1)Jul-Apr 2) 360 3)Yes 4)English 5)4-5 students are accepted annually from other countries, such as Iran, Jordan, Egypt, Thailand, Malaysia, Tanzania.

Courses

*** FIRST DEGREE
4½-year degree course in medicine and surgery (MBBS).

**** DIPLOMAS
1-year postgraduate diploma courses in child health, medical laboratory technology, medical radiology, ophthalmology, orthopaedics, laryngology & otology, gynaecology & obstetrics, anaesthesiology.

**** MASTER'S LEVEL
Postgraduate degree courses include 4 semesters for biochemistry, 3 years for anatomy, general medicine, general surgery, microbiology, obstetrics & gynaecology, ophthalmology, orthopaedics, paediatrics, pathology, pharmacology, physiology, preventive and social medicine, radiology.

Note
Founded in 1877 as the Mohammedan Anglo-Oriental College, the university is a teaching and residential institution which brings together students from different religious, linguistic and cultural backgrounds. There are facilities for doctoral studies.

IND 3 **ALL INDIA INSTITUTE OF HYGIENE AND PUBLIC HEALTH**

A constituent institute of the University of Calcutta

Enquiries
Director, All India Institute of Hygiene and Public Health, 110 Chittaranjan Avenue, Calcutta - 73. Tel: 9345271.

Managing agency
Indian Ministry of Health & Family Welfare

General details
1)From Jul & Nov 2) 281 3) 90m & 40f 4)English 5) 10-12 students are accepted annually from Zambia, Sierra Leone, Botswana, Mauritius, Bangladesh, Burma, Nepal.

Relevant departments
Biochemistry & nutrition - Epidemiology - Health education - Maternity & child welfare - Microbiology - Cultural anthropology - Veterinary public health - Social & preventive medicine - Sanitary engineering - Statistics.

Courses

*** PUBLIC HEALTH NURSING
1-year course for theoretical and practical instruction, leading to Diploma in Public Health Nursing (see IND 77). A further certificate course in public health nursing supervision is available to provide refresher experience to existing public health nurses, to prepare them for supervisory positions (3 months).
Senior Nursing/Midwife Certificate

**** PUBLIC HEALTH
1-year Licentiate in Public Health of the Faculty of Tropical Medicine and Hygiene, West Bengal.
Medical graduates or licentiates, who are not eligible for the DPH course.

**** WATER AND SEWAGE ANALYSIS
10-week course in water and sewage analysis, to prepare chemists/biologists/bacteriologists in water and sewage treatment plants to tackle problems confronting them.
BSc degree in science with chemistry or biology as one of the subjects; sponsored candidates, preferably with some experience.

**** MASTER'S LEVEL
2-years for master's degree of veterinary public health (MV(PH)); 10 months plus 1 year practical work for public health engineering (ME(PH)).
For MV (PH), MBBS or BVSc and AH of recognized university; for ME(PH), recognized BE in civil engineering.

**** DOCTORAL STUDIES
2 years (including work on thesis) for Doctor of Medicine (social and preventive medicine) of Calcutta University and for Doctor of Science (Public Health); facilities available for research in public health disciplines, which can be utilized for a thesis for PhD of Calcutta University (minimum 2 years).

**** VARIOUS
Various university diploma courses are available: dietetics, health education, health statistics, industrial health (1-year duration); maternal and child welfare, public health (10 months), nutrition (9 months).
Relevant first degree, with other requirements according to course selected.

Note — The Institute also runs short (3-4 week) job orientation courses for medical officers in family planning and in various health problems of rural communities.

IND 4 ALL INDIA INSTITUTE OF MEDICAL SCIENCES

Enquiries — Registrar, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, 110016. Tel: 623053; telegram: MEDINST NEW DELHI

General details — 1)Jul-May in 2 semesters 2) 656 3) 12 hostels

Relevant departments — Anaesthesiology - Anatomy - Biochemistry - Biomedical engineering unit - Biophysics - Biostatistics unit - Cardiology - Cardiothoracic and vascular surgery - Community medicine (centre for) - Dental surgery - Dermatology and venereology - Forensic medicine - Gastroenterology - History of medicine - Hospital administration - Medicine - Microbiology - Neurology - Neurosurgery - Nuclear medicine unit - Obstetrics and gynaecology - Ophthalmology - Orthopaedics - Otorhinolaryngology - Paediatrics - Paediatric surgery - Pathology - Pharmocology - Physiology - Psychiatry - Radiodiagnosis - Radiotherapy - Rehabilitation and artificial limbs - Reproductive biology - Surgery - Urology.

Courses

*** FIRST DEGREES
2-year course in nursing (see IND 78); 3 years in medical laboratory technology, occupational therapy, ophthalmic techniques or physiotherapy; 4½ years in medicine and surgery.

**** MASTER'S LEVEL
2 to 3-years in anaesthesiology, anatomy, biochemistry, biophysics, dermatology and venereology, forensic medicine, general surgery, hospital administration, medicine, microbiology, obstetrics and gynaecology, ophthalmology, orthopaedic surgery, otorhinolaryngology, paediatrics, pathology, pharmacology, physiology, preventive and social medicine, psychiatry, radiodiagnosis, radiotherapy; 2 to 3½ years for MSc in anatomy, biochemistry, biophysics, drug assay, microbiology, pharmacology, physiology; 2-year post-master's courses for MCh in other surgical specializations.

**** DOCTORAL STUDIES
Courses of unspecified length are available in cardiology, gastroenterology, or neurology; PhD requires 2 to 3 years.

**** VARIOUS
2-year Diploma courses in clinical technology, optometry, orthoptics.

Note — Founded in 1956 as an institution of national importance, the institute is teaching and residential, providing both undergraduate and postgraduate medical training, and conducting research in a wide range of medical science subjects. ETR-77

IND 5 ALL INDIA INSTITUTE OF PHYSICAL MEDICINE AND REHABILITATION

Enquiries — Director, All India Institute of Physical Medicine and Rehabilitation, Hazi Ali Park, Clerk Road, Mahalaxmi, Bombay-34

Courses — Details not available.

IND 6 ALL INDIA INSTITUTE OF SPEECH AND HEARING

Enquiries — Director, All India Institute of Speech & Hearing, Manasagangothri, Mysore-6. Tel: 20715; telegram: Logopedics

Managing agency — Ministry of Health and Family Welfare

General details — 1)Jul/Aug to Mar/Apr 2) 70 3) 30m & 30f 4)English 5) 3 students from other countries have been accepted annually for BSc course, but no restrictions are laid down.

Relevant departments — Speech pathology - Audiology - Psychology - ENT

Courses — *** SPEECH & HEARING
3 years for BSc in speech & hearing, to provide clinical services to those with speech and hearing communication disorders.
PUC with PCMB combination, with minimum 50% marks in optionals.

**** SPEECH & HEARING
2 years after first degree for MSc in speech & hearing; 3 years after MSc for PhD (Speech & Hearing).

IND 7 ANCILLARY MEDICAL TRAINING SCHOOL, JAMMU

Enquiries — Principal, Ancillary Medical Training School, SMGS Hospital, Jammu (Tawi), Jammu and Kashmir State. Tel: 5333, 5080 & 5746.

Managing agency — Government of Jammu & Kashmir

General details — 1)From Jul 2) 147 3) 50f (see Note) 4)English & Hindi/Urdu 5)No students from other countries have so far been accepted.

Courses — ** DENTAL ASSISTANT
1-year diploma course for dental assistant.
Matriculation with sciences, age 17-25 years.

** LABORATORY ASSISTANT
1-year diploma course for laboratory assistant.
As for Dental assistant course, above.

** MEDICAL ASSISTANT
1-year diploma course for medical assistant.
As for Dental assistant course, above.

** NUSING/MIDWIFERY
4-year diploma course in general nursing and midwifery. This includes 1½ years female multipurpose training course (as per pattern of Government of India).
As for Dental assistant course, above.

** OPHTHALMIC ASSISTANT
2-year diploma course for ophthalmic assistant.
As for Dental assistant course, above.

** SANITARY INSPECTOR
1-year diploma course for sanitary inspector.
As for Dental assistant course, above.

** RADIOGRAPHY/X-RAY ASSISTANT
1-year diploma course for X-ray assistant.
As for Dental assistant course, above.

Note — The School functions under the overall supervision of the Medical College, Jammu and attached hospitals (Chest Diseases Hospital, Eye Hospital, Psychiatric Hospital, Children's Hospital). Some support from UNICEF is provided in terms of equipment for practical demonstration to the Auxiliary Nurse Midwife traineee students.
A new hostel is currently under construction.

IND 8 ANDHRA UNIVERSITY

Associated institutions — **Guntar Medical College**
Rangaraya Medical College, Kakinda
Andrha Medical College, Visakhapatnam

Enquiries — Registrar, Andhra University, Waltair, Visakhapatnam, Andhra Pradesh, 530003. Tel: 4871; telegram: University Waltair.

General details — 1)University colleges, Jul-Mar in 2 terms or Aug-May in 2 semesters; other colleges Jul-Mar in 3 terms 2)c.4,500 (in university colleges); 44,297 (in affiliated colleges) 3) 1,773 excluding affiliated colleges 4)English and Telegu at first degree level; only English for postgraduate and professional courses.

Relevant faculties — Medicine - Science

Courses

*** FIRST DEGREES
3-year courses in home science; 4 years in pharmacy; 5½ years plus 1 year's housemanship in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in pharmacy. Medical and surgical specializations require 3 to 5 years after medical or hospital practice.

**** DOCTORAL STUDIES
PhD requres 2 years in faculty of science, and 3 years in faculty of medicine. DSc requires 3 years after PhD in faculties of medicine or science.

**** DIPLOMA
2-year courses for postgraduate diplomas in anaesthetics, child health, clinical pathology, dermatology, general medicine, general surgery, gynaecology and obstetrics, laryngology and otology, ophthalmology, public health, tuberculous diseases, venereology.

Note — Founded in 1926, the university comprises five university colleges providing courses for higher degrees, 76 affiliated colleges and a

number of colleges providing courses for criental titles only. Associated with the university is a postgraduate centre. ETR-77

IND 9 **AWADHESH PRATAP SINGH VISHWAVIDYALAYA**

Associated institution: **Shyam Shah Medical College, Rewa**

Enquiries: Registrar, Awadhesh Pratap Singh Vishwavidyalaya, Rewa, Mahhya Pradesh 486003. Tel: 277; telegram: University Rewa

General details: 1)Jul-Apr in two terms 2)c22,000 3)None 4)English for medicine, surgery.

Relevant faculty: Medicine

Courses:

*** FIRST DEGREES
4½-year course in medicine and surgery.

**** MASTER'S LEVEL
Medical and surgical specializations require 2 years plus 12 months clinical practice.

**** CLINICAL PATHOLOGY
1-year postgraduate diploma course in clinical pathology.

Note: Founded in 1968, the university, consisting of 48 affiliated colleges, has no teaching departments of its own. ETR-77

IND 10 **BANARAS HINDU UNIVERSITY**

Associated institution: **Institute of Medical Sciences, Varanasi**

Enquiries: Registrar, Banaras Hindu University, Baranasi, Uttar Pradesh, 221005. Tel: 54290; telegram: Hindu University

General details: 1)Jul-Apr in 2 terms 2) 13,500 3) 6,000 4)English and Hindi for most first degree courses; English only for more advanced courses 5)Students from other countries are accepted.

Relevant faculty: Medical sciences.

Courses:

*** FIRST DEGREES
3-year courses for first degrees in science subjects; 4 years in pharmacy; 5½ years in medicine and surgery.

**** MASTER'S LEVEL
2 years in pharmacy.

DOCTORAL STUDIES
PhD requires 2 years in faculty of medicine. DSc requires 3 years after PhD.

**** DIPLOMA
1-year postgraduate Diploma courses in anaesthetics, child health, clinical pathology, clinical psychology, laryngology and otology, medical radiodiagnosis, ophthalmic medicine and surgery, spectroscopy.

Note: Founded in 1915, this is ateaching and residential university. ETR-77

IND 11 **BANGALORE UNIVERSITY**

Associated institutions
Bangalore Medical College
College of Nursing (see IND 84)
Dental College
Government College of Pharmacy
Institute of Aviation Medicine (see IND 46)
National Institute of Mental Health (see IND 71)
St John's Medical College (see IND 119)

Enquiries
Registrar, Bangalore University, Jnani Bharathi, Bangalore, Karnataka 390002. Tel: 61241; telegram: Univangalore.
Or Principal of associated institutions.

IND 12 **BERHAMPUR UNIVERSITY**

Associated institution
M.K.C.G. Medical College, Berhampur.

Enquiries
Registrar, Berhampur University, Berhampur, Dist. Ganjam, Orissa, 760007
Tel: 42; telegram: Berhampur University.

General details
1)Jun-May in 2 terms 2)c.10,075 (total) 3)Yes 4)English 5)No students from other countries have so far been accepted.

Relevant faculty
Medicine

Courses
*** FIRST DEGREES
4½ years for medicine and surgery.
Pre-university level, with certain subject requirements.

**** MASTER'S LEVEL
2-years for MD in obstetrics & gynaecology, in medicine, in social and preventive medicine, in pathology, in pharmacology, in physiology, in forensic medicine and toxicology, in anaesthesiology and in paediatrics; and for MS in surgery, in ophthalmology, in otorhino-laryngology, in anatomy and in orthopaedic surgery.

**** DOCTORAL STUDIES
PhD requires 3 years after master's degree.

**** VARIOUS
1-year postgraduate diploma courses in anaesthesiology, child health, clinical pathology, ophthalmology, orthopaedics.

Note
Founded in 1967, Berhampur is both a teaching and affiliating university with 18 affiliated colleges. It aims at developing higher education and promoting research in this underdeveloped part of the state.

IND 13 **BHAGALPUR MEDICAL COLLEGE**

Affiliated to Bhagalpur University

Enquiries
Principal, Bhagalpur Medical College, Bhagalpur, Bihar.

Managing agency
Government of Bihar

General details
1)Jun-May 2) 50 3)Yes 4)English 5) 2 students are accepted annually from Nepal.

Relevant departments
Anatomy - Physiology - Biochemistry - Pathology - Pharmacology - Preventive & social medicine - Forensic medicine & toxicology -

Medicine - Surgery - Ophthalmology - ENT - Obstetrics & gynaecology.

Courses

*** FIRST DEGREE
4½ years for medicine and surgery (MBBS).
Intermediate science, with physics, chemistry, botany and zoology, and English.

IND 14 **BHOPAL VISHWAVIDYALAYA**

Associated institutions

Gandhi Medical College, Bhopal
Government Maharani Laximibai Girls' College, Bhopal

Enquiries

Registrar, Bhopal Vishwavadyalaya, Bhopal, Madhya Pradesh, 462006.
Tel: 1203; telegram University Bhopal

General details

1)Jul-Apr in 3 terms 2)c.17,500 3)No 4)English 5)Students from other countries have been accepted.

Relevant faculties

Home science - Life sciences - Medicine.

Courses

*** FIRST DEGREES
3-year courses in home science; 5½ years in medicine and surgery.

**** MASTER'S LEVEL
2-year course in home science; 3 years in ear-nose-and-throat, medicine, obstetrics and gynaecology, ophthalmology, orthopaedics, paediatrics, pathology, pharmacology, physiology, preventive and social medicine, radiology, surgery.

**** DIPLOMA
2-year postgraduate Diploma courses in anaesthetics, child health, clinical pathology, forensic medicine, medical radiology and electrology, ophthalmic medicine and surgery.

Note

Founded in 1970 this is mainly an affiliating university with some 24 affiliated colleges. ETR-77

IND 15 **BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE**

Enquiries

Registrar, Birla Institute of Technology & Science, Pilani 333031, (Rajasthan). Tel: 92; telegram: Bits Pilani

General details

1)Jul-Dec, Jan-May 2) 2221 3) 2004 (incl. 96f) 4)English 5)About 10 students annually are accepted from other countries such as Kenya, Kuwait, Malaysia, Tanzania, Thailand, USA, Uganda.

Relevant departments

Biological sciences - Chemistry - Chemical engineering - Pharmacy - Physics - Science & technology development

Courses

*** FIRST DEGREES
4-year honours degree course in pharmacy (BPharm (Hons)). 5 year course in biological sciences, leading direct to MSc (Hons) Biological Sciences.
Pass in Higher Secondary Exam or equivalent with maths, physics, chemistry and English.

**** MASTER'S LEVEL
2 years for master's degree in pharmacy (MPharm). (See also MSc course above, under first degrees.)
For MPharm, BPharm (Hons) from the Institute or a recognized university.

Note

The Institute is "deemed to be a University", by a government notification published in 1964. It is the only technological

institution in the country with fully developed faculties of Humanities and Social Sciences and Departments of Pharmacy and Biological Sciences. A collaboration programme with the Massachussetts Institute of Technology, USA, and the Ford Foundation has concentrated on supplementing the Institute's library, and computer centre facilities. Research facilities are available in all the disciplines, with strong emphasis on alternative sources of energy, waste treatment including waste disposal, affluent treatment and pollution, science and society including science teaching, water management. For all programmes and disciplines there is an alternative scheme with practice school under which students spend 6-10 months working as partners of a teacher/student/professional experts team on multidisciplinary problems of direct importance to host organizations at practice school stations, in addition to taking course work at the institute.

IND 16 BURDWAN MEDICAL COLLEGE

Affiliated to the University of Burdwan

Enquiries: Principal, Burdwan Medical College, Burdwan-713104.

Managing agency: Government of West Bengal

General details: 1)Not known 2)Intake 50 p.a. 3) 300m & 75f 4)English 5)Students from other countries have not so far been accpeted, and application would have to be made at Government level.

Relevant departments: Anatomy - Physiology - Pharmacology - Pathology - PSM - Medicine - Surgery - Obstetrics & gynaecology - Ophthalmology - ENT - FSM and allied departments

Courses:

*** FIRST DEGREES
4½ years for general medicine and surgery (MBBS), of the University of Burdwan.
Higher Secondary School Certificate and selection on the basis of Joint Entrance Exam; age 21 years.

IND 17 CALICUT MEDICAL COLLEGE

Affiliated to the University of Calicut

Enquiries: Principal, Calicut Medical College, Calicut-8, Kerala State.
Tel: 73983; telegram: CALMED

Managing agency: Government of Kerala

General details: 1)Jun-Mar 2) 1152 3)Yes 4)English 5)About 6 students are accepted annually from other countries.

Courses:

** HEALTH INSPECTION
1-year certificate course for health inspectors, to provide hospital staff.
Secondary School Leaving Certificate

** PHARMACY
2-year diploma course in pharmacy, to train hospital staff.
Secondary School Leaving Certificate with 40% marks in English and science, age 16-23.

*** LABORATORY TECHNOLOGY
1-year certificate course for laboratory technician, to provide hospital staff.
Pre-degree, with physics, chemistry and biology; age 18-21.

*** FIRST DEGREES
4½ years in medicine and surgery (MBBS)
Pre-degree, with physics, chemistry and biology; age at least 17 years.

**** MASTER'S LEVEL
3 years for MD and MS
Appropriate first degree

IND 18 **CENTRAL DRUG RESEARCH INSTITUTE**

Enquiries: Director, Central Drug Research Institute, Chattar Manzil Palace, P.O. Box No 173, Lucknow 226001

Managing agency: Council of Scientific and Industrial Research

Courses:
**** DRUG RESEARCH
Opportunities are provided for graduates to work for higher degrees in medicine related to medicinal drugs.
Holders of master's-level degrees in medicine/surgery. ETR-77

IND 19 **CENTRAL DRUGS LABORATORY**

Enquiries: Director, Central Drugs Laboratory, 3 Kyd Street, Calcutta 700016. Tel: 24-9581; telegram: Biostanlab Calcutta

Managing agency: Ministry of Health & Family Welfare

General details: 1)Varies 2) 16 3)None at present 4)English 5)Four students from developing countries usually attend each course

Relevant departments: Pharmacology & toxicology - Pharmacognosy - Bacteriology - Biochemistry - Pharmaceutical chemistry

Courses:
**** DRUG ANALYSIS
2-month course in the instrumental method of analysis of drugs, to provide trained personnel to drug control authorities, in quality control.
Bachelor of science with chemistry, or bachelor of pharmacy, with experience in drug analysis.

**** DRUG ANALYSIS
4-month course similar to above but in biological methods of testing of drugs.
As above.

IND 20 **CENTRAL FOOD LABORATORY**

Enquiries: Director, Central Food Laboratory, 3 Kyd Street, Calcutta-700016. Tel: 24-0019; telegram: Cenfoodlab Calcutta.

Managing agency: Ministry of Health and Family Welfare

General details: 1)Varies 2) 40-50 3)No hostel, but arrangements can be made 4)English 5)Students from other countries have been accepted.

Relevant departments: Legal (for analysis of foodstuffs to detect adulterants) - Research - and standardization - Pesticide residue and food additives - Instrumentation

Courses

**** FOOD ANALYSIS
1-month orientation training for public analysts/senior chemists, covering sophisticated methods of analysis, detection of adulterants: difficulties, recent and improved methods, analytical problems, uniformity of methods and accuracy of results.
Minimum BSc in chemistry with experience as/under public analyst.

**** FOOD INSPECTION
45 working days statutory training for food inspectors, covering methodology of sampling, legal implications and food standards.
Minimum BSc in chemistry, or qualified sanitary inspectors with 1 year practical experience.

**** FOOD TECHNOLOGY/RESEARCH
4 months to 1 year of training for WHO fellows in food analysis and research projects.
Minimum BSc in chemistry with experience in food analysis.

Note

Established in 1955, the laboratory undertakes various research projects on problems of food analysis, and detection and determination of quantum of adulterants, and other contaminants, pesticide residues and environmental pollutants in foods. It is recognized by the universities of Calcutta, Jadavpur, North Bengal for PhD degrees in science and food technology. The laboratory has links with the Indian Standards Institute and other similar central state government scientific institutes.

IND 21 CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE

Enquiries

Chairman, Training Centre, Central Food Technological Research Institute, Mysore 570013. Tel: 23539; telegram: Foodsearch or Foodagri

Managing agency

Council of Scientific & Industrial Research

General details

1)Postgraduate course Aug-Jul, others not fixed 2)c.100 3) 80m & 20f 4)English 5) 10-15 from S E Asia, Africa & Latin America

Courses

**** FOOD TECHNOLOGY
2-year postgraduate course in food science and technology, leading to MSc (Food Technology)
Degree in food technology or science, or in agriculture or dairy technology, with at least 2 years study of maths at university level. Other qualifications or exceptional experience in the field may be considered.

**** FOOD TECHNOLOGY
8-12 weeks refresher courses in aspects of food technology, for example: Processing and quality control of meat and poultry products, Fruit and vegetable technology, Food packaging, Flour milling and baking technology, Fish processing, Rice technology, etc.
Food industries/organizations personnel.

Note

International courses have been conducted on behalf of FAO (International Food Technology Training Centre) and UNIDO and for GOI/TCS, Colombo Plan and SCAAP fellowships. The institute also accepts research trainees. ETR-77

IND 22 CENTRAL HEALTH EDUCATION BUREAU

Enquiries

Director, Central Health Education Bureau, New Delhi. Tel: 274801; telegram: Arogshik

Managing agency

Ministry of Health

General details: 1)Varies 2) 200 3) 32m, 4F 4)English 5)About 10 students annually are accepted from other countries, mainly from the South-East Asia and East Mediterranean regions. International candidates should be sponsored.

Relevant departments: Health education - Environmental health - School health administration - MCH & family welfare - Nutrition - Behavioural science - Research & evaluation - Communication - Field study & demonstration - Media & methods division.

Courses:

*** HEALTH EDUCATION
30-day certificate course in health education for media personnel, providing extensive practical training on audio visual techniques, projection, artwork, photography, script writing etc.
High school education, with previous experience as audio visual technician, etc.

*** HEALTH EDUCATION
3-month certificate course in health education (two courses a year, commencing July and September).
Graduate, LHV/Public health nurse, Sanitary inspector, etc, with experience in public health work.

**** HEALTH EDUCATION
30-day certificate course in health education for medical officers (one course a year, commencing February/March).
MBBS

**** HEALTH EDUCATION
1-year diploma course in health education, leading to DHE.
Recognized first degree in medicine and surgery, social sciences or arts and science, or master's degree in selected social sciences or education nursing, all with substantial relevant experience.

Note: This institute is also providing orientation training to national and international visitors, mainly from South-East Asia and from international agencies such as WHO, UNDP, UNICEF. The institute has a well-developed research unit, and field study demonstration centres in urban and rural areas, accommodating various projects related to behavioural studies and health education.

IND 23 CENTRAL JALMA INSTITUTE FOR LEPROSY

Enquiries: Director, Central Jalma Institute for Leprosy, Taj Ganj, Agra 282 001 (U.P.). Tel: 64911; telegram: Jalma

Managing agency: Indian Council of Medical Research

General details: 1)Twice a year 2) 24 annually 3) 20 4)English 5) 2 students are accepted annually, from UK.

Relevant departments: Clinical - Immunology - Biochemistry - Pathology - Tissue culture - Experimental leprosy

Courses:

*** LEPROSY CARE
4-6 weeks training in various aspects of leprosy for MBBS final year students from UK, during their elective period.
MBBS final year students from UK during the elective period sponsored by Govt. of UK.

**** LEPROSY CARE
6-week certificate course in leprosy diagnosis and care for medical officers, including the organization of field work and the establishment of routine investigative laboratories.
MBBS, with experience in leprosy and holding medical officer post in leprosy.

Note — Other short term/ad hoc training given to paramedical workers and nurses, to medical students from local medical colleges, to DPH and MD students. Guidance is also given to students engaged on thesis work connected with leprosy medicine. The Institute also collaborates with scientists from aborad in related studies.

The Institute provides service facilities to patients, and has a 50-bed in-patient ward treating leprosy patients.

IND 24 CENTRAL LEPROSY TEACHING AND RESEARCH INSTITUTE

Enquiries — Director, Central Leprosy Teaching and Research Institute, Chengalpattu - 603001. Tel: 275; telegram: Centlepins

Managing agency — Ministry of Health, Government of India

General details — 1)Varies 2) 130 3) 44m & 3f 4)English 5)Students from other countries in Asia, Africa and from Australia have been trained, sponsored by international agencies such as WHO.

Relevant departments — Clinical - Laboratories - Epidemiology & statistics.

Courses

** LEPROSY/LABORATORY METHODOLOGY
6-month training course in laboratory methodology for leprosy work.
Matriculation or equivalent, with science subjects; some previous experience in laboratory technology.

** PHYSIOTHERAPY IN LEPROSY CARE
9-month training course for physiotherapy technician in leprosy, to meet the requirements of leprosy institutions.
Matriculation of equivalent, some experience as physiotherapy technician preferred.

*** LEPROSY CARE
4-month training course in leprosy for non-medical supervisors, to keep them acquainted with latest knowledge in leprosy and enable them to supervise paramedical workers in field work.
Matriculation, with previous training/experience in leprosy as paramedical worker. Graduates preferred.

**** LEPROSY CONTROL
6-week training course in leprosy for medical officers to train doctors for the National Leprosy Control Programmes.
Graduates in medicine.

**** LEPROSY CONTROL SUPERVISION
3-week training course in leprosy for zonal/district leprosy officer, to acquaint senior doctors with latest developments and enable them to supervise leprosy control work.
Graduate in medicine, already engaged in leprosy work.

**** LEPROSY SURGERY
4-week training course in reconstructive surgery in leprosy.
Qualified postgraduates in surgery, with surgical experience.

Note — The Institution is undertaking a therapeutic trial with multi-drug regimens under the auspicies of the THELEP Programme of WHO. The Institute also runs refresher courses in leprosy for doctors engaged in leprosy work.

IND 25 CENTRAL POLYTECHNIC

Enquiries — Principal, Central Polytechnic, Adyar, Madras 600 020. Tel: 412474.

Managing agency — Directorate of Technical Education, Government of Tamil Nadu

General details 1)From Jun 2) 1,155 3)c.210m 5)Students have been accepted from Asian and African countries.

Courses

*** PROSTHETICS AND ORTHETICS
3 years for Diploma in Prosthetics and Orthetics.
School certificate with algebra and geometry, or physics or engineering as elective with university entrance standard.

**** MEDICAL EQUIPMENT TECHNOLOGY
1½ years for Post Diploma in Medical Equipment Technology.
Degree in electrical engineering or electronics or diploma in electronics, or in electrical engineering with electronics as elective.

Note The Polytechnic also offers a variety of sandwich and part-time courses. It is included because it has accepted many students from other Commonwealth countries. ETR-77

IND 26 CHITTRANJAN SEVA SEDAN, COLLEGE OF OBSTETRICS, GYNAECOLOGY AND CHILD HEALTH

Enquiries Principal, Chittranjan Seva Sedan, College of Obstetrics, Gynaecology and Child Health, Calcutta - 26

Courses Details not available.

IND 27 CHRISTIAN MEDICAL COLLEGE HOSPITAL

Affiliated to the University of Madras

Enquiries Medical courses: Registrar, Christian Medical College, Vellore-632002. Paramedical courses: Medical Superintendent, Christian Medical College and Hospital, Vellore-632004; Nursing course: The Dean, College of Nursing, Christian Medical College Hospital, Vellore-632004.

General details 1)Varies 2)c.370 3)For most students 4)English 5)Candidates from overseas whose qualifications are deemed satisfactory may be eligible for entry to most courses.

Courses

** NURSING/MIDWIFERY/PHARMACY
3½-year certificate programme in general nursing and in midwifery with community nursing; 2-year diploma course in pharmacy.
Secondary School Leaving Certificate.

*** MIDWIFERY/COMMUNITY NURSING
10-month post-certificate course in community nursing and family planning; midwifery programme (for fully-qualified nurses) leading to Certificate in Midwifery.
Nursing graduates.

*** VARIOUS PARAMEDICAL
Paramedical diploma courses include: 3 years for physiotherapy and occupational therapy; 2 years for pharmacy, radiotherapy, radiodiagnosis, optometry; 1 year for clinical laboratory technology and histo-pathological laboratory technology, and ECG laboratory technology.
Pre-university exam with certain subject requirements according to course taken.

*** FIRST DEGREES
4-year course leading to MBBS, and for nursing (2½ years for certificate holders).
Pre-university, or equivalent, subject to selection.

**** MASTER'S LEVEL
2-year postgraduate programme leading to MSc in nursing. 3-year higher degree courses in general medicine, obstetrics & gynaecology, pathology, microbiology, physiology, pharmacology, paediatrics, radiodiagnosis, radiotherapy, anaesthesiology, biochemistry, preventive and social medicine, general surgery, orthopaedics, oto-rhino-laryngology, anatomy, neurosurgery, neurology, cardiology, nephrology, thoracic surgery, genito-urinary surgery, pharmacology.
First degree plus two years' experience, subject to selection.

**** VARIOUS PARAMEDICAL
Paramedical postgraduate diploma courses include: 2 years for ECG and cardiac catheterization laboratory technology; 1 year for EEG laboratory technology, clinical laboratory technology - tutor technician grade, hospital administration, medical records, science, medical microbiology, dialysis technology.
Mainly graduates in relevant subjects, though a lower suitable qualification may be acceptable if accompanied by substantial experience.

**** VARIOUS
Various postgraduate diploma courses of 2-3 years durations include: child health, obstetrics & gynaecology, anaesthesia, clinical pathology, oto-rhino-laryngology, orthopaedics, ophthalmology, physical medicine, medical radiology diagnosis, medical radiology therapy, psychological medicine.
As for higher degrees, above.

Note — The Christian Medical College Hospital has about 1,200 beds and nearly 2,000 out-patients are treated daily. Extensions of the hopsital include an eye hospital, a mental helath centre, two rural hospitals, a rehabilitation centre for leprosy patients and a rehabilitation institute for disabled persons requiring prolonged treatments and trainings.

IND 28 COLLEGE OF HOME SCIENCE

Affiliated to the University of Bombay

Enquiries — Director, College of Home Science, Nirmala Niketan, 49 New Marine Lines, Bombay 400020. Tel: 293217; telegram: Nirmalseva.

General details — 1)July-Apr 2) 90 3) 10-20 4)English 5)Students have been accepted from East and South Africa, Mauritius, Ceylon and Indonesia - no fixed number.

Relevant departments — Nutrition and dietetics - Medical technology

Courses

*** NUTRITION & DIETETICS
3-year degree course in nutrition and dietetics, leading to BSc (Home Sc.) Nutrition & Dietetics of the University of Bombay.
Standard XII of secondary education.

**** NUTRITION & DIETETICS
2 years for Master of Home Science in the branch of nutrition and dietetics.
BSc (Home Science) in the branch.

**** DIETETICS & APPLIED NUTRITION
1-year postgraduate diploma (University of Bombay) course in dietetics and applied nutrition.
BSc with chemistry, microbiology and home science.

**** MEDICAL LABORATORY TECHNOLOGY
6 months plus 2 months work experience for institute's postgraduate diploma im medical laboratory technology.
Science graduates.

IND 29 **DIBRUGARH UNIVERSITY**

Associated institution: **Assam Medical College, Dibrugarh**

Enquiries: Registrar, Dibrugarh University, Dibrugarh, Assam. Tel: 468; telegram: University Dibrugarh

General details: 1)Jul-Jun (except for postgraduate teaching degree: Apr-May) 2)c.35,000 in university proper 3) 420 4)Assamese and English

Relevant faculties: Medicine - Science.

Courses:

*** FIRST DEGREES
5½-year courses in medicine and surgery.

**** MASTER'S LEVEL
2½-year courses in anaesthesiology, anatomy, ear-nose-and-throat, general medicine, general surgery, obstetrics and gynaecology, ophthalmology, paediatrics, pathology, pharmacology, physiology, radiology.

**** DOCTORAL STUDIES
PhD requires 2 years.

**** DIPLOMA
1-year postgraduate Diploma courses in anaesthesiology, ear-nose-and-throat, medical radiodiagnosis, obstetrics and gynaecology, ophthalmology, paediatrics, pathology.

Note: Founded in 1965, the university is a teaching and affiliating institution with one constituent and some 58 affiliated colleges.ETR-77

IND 30 **DR VAISHAMPAYAN MEMORIAL MEDICAL COLLEGE, SOLAPUR**

Affiliated to Shivaji University

Enquiries: Dean, Dr V M Medical College, Solapur, Maharashtra. Tel: 2278

Managing agency: State Ministry of Health

General details: 1)Jun & Nov 2) 408 3) 292m & 54f 4)English 5)None as yet.

Relevant departments: Anatomy - Physiology - Biochemistry - Pathology - Pharmacology - PSM - Microbiology - Medicine - Gestation & gynaecology - Surgery - Paediatrics - Anaesthesia

Courses:

*** FIRST DEGREE
5½ years, including 1-year internship training, for MBBS.
Pre-professional or S.Y.J.C. (Standard XII)

**** HIGHER DEGREE/DIPLOMA
2 years for diploma courses, 3 years for MD/MS.
MBBS and 1 year housemanship, or 1 year service in the subject.

**** DOCTORATE STUDIES
PhD (Bio-chem) 2 years after master's degree.

IND 31 **FAMILY WELFARE TRAINING AND RESEARCH CENTRE**

Enquiries: Officer-in-Charge, Family Welfare Training and Research Centre, REHAB Centre 4th Floor, Haji Ali, Bombay-400034. Tel: 891278 & 891272; telegram: Kutumb, Bombay

Managing agency — Government of India, Ministry of Health & Family Welfare

General details — 1)Varies 2)c.100 (varies according to need) 3)Some 4)Mainly English, sometimes Hindi and Marathi for local candidates 5) 2 candidates annually are admitted from other countries such as Afghanistan, UAR, Philippines and Malaysia.

Relevant departments — Training - Research - Clinics - Audio-visual aids - Education

*** HEALTH EDUCATION SUPERVISOR
2-month certificate course of field supervising training for Diploma of Health Education students.
Theoretical knowledge of health education, in-service persons working in the health education field, age no bar.

**** MULTIPURPOSE HEALTH WORK
15 working days, leading to certificate, for district medical officers to impart knowledge to implement the multi-purpose health workers scheme.
Minimum MBBS, persons already occupying the post of DHO or equivalent; age no bar.

**** HEALTH EDUCATION TRAINER/SUPERVISOR
30 working days for key trainers training course under the multi-purpose health workers scheme, leading to certificate. The main purpose is to prepare participants for giving training to basic health workers, assistants and supervisory staff at the rural field level.
Medical graduates, degree in nursing or equivalent, social science degree or equivalent, sanitary inspectors degree or diploma, with experience.

**** HEALTH EDUCATION MEDIA
45 working days, leading to certificate, to make in-service personnel aware of the different media of education for the successful implementation of MPW/CHW scheme in rural areas, so that they may function as district mass education officers and district extension educators.
Graduates, or equivalent, with experience in mass media education or extension education in the field areas.

**** COMMUNITY HEALTH
1-week certificate course for community health workers to make them understand the new CHW scheme and implement it in their own rural areas.
District Health officers and medical officers from primary rural health centres.

Note — There are other courses and workshops; e.g. 1-10 day workshops on topics like population and sex education in schools and colleges, training methodology, evaluation, FPD areas; and special courses for individual or specific groups as requested by the Training Division, Ministry of Health and Family Welfare. International students have all been fellowship holders of agencies like WHO.

It is hoped soon to offer training and accommodation to a minimum of 30 students at a time.

IND 32 FORENSIC SCIENCE LABORATORIES

Recognized by the University of Bombay

Enquiries — Director, Forensic Science Laboratories, Maharashtra State, Bombay 400008.

Managing agency — Government of Maharashtra

General details 1)Not fixed 2)Varies 3)None 4)English 5)No students from other countries have so far been accepted, but might be.

Relevant departments Analytical toxicology - Forensic serology - Forensic ballistics - Forensic chemistry - Forensic physics

Counses **** FORENSIC SCIENCE
There are no courses as such but trainees from various agencies such as the central and state forensic science laboratories, the Institute of Criminology and Forensic science, the Veterinary Department are accepted from time to time, by mutual arrangement.
In-service trainees.

IND 33 **GANDHIGRAM INSTITUTE OF RURAL HEALTH AND FAMILY PLANNING**

Affiliated to Madurai Kamaraj University for certain courses

Enquiries Director, Gandhigram Institute of Rural Health and Family Planning, P.O. Ambathurai RS, Madurai District, Tamil Nadu-624309. Tel: Chinnalapatti 346 & 347; telegram: HEFA-Gandhigram, Madurai Dt.

General details 1)From July & Feb (short-term courses) 2)c.580 3) 250, + 20 international hostel places 4)English & Tamil (for health visitors courses) 5)About 10 students are accepted annually from Indonesia, Afghanistan, Bangladesh, Nepal, Sri Lanka, Somalia; WHO candidates from Europe, USA and other countries.

Courses ** HEALTH VISITING
30-month Diploma course for lady health visitors; 18-month (regular) course in health visiting. Only women candidates are admitted to both courses.
Matriculation (11 years of schooling), and aged 18-35 years, for integrated course; matriculation plus a diploms/certificate in nursing and/or midwifery, no age restriction, for regular course.

**** APPLIED NUTRITION/PUBLIC HEALTH
1-year postgraduate Diploma course (affiliated to Maduai Kamaraj University) in applied nutrition and public health.
Bachelor degree in science with chemistry as one of the subjects.

**** HEALTH EDUCATION
1-year postgraduate Diploma course (affiliated to Madurai Kamaraj University) in health education.
Bachelor degree with minimum of 2 years experience in community health, or medical graduate, or master's degree.

**** COMMUNITY HEALTH
2 years for MD (Community Health).
MBBS with year of housemanship; preference given to candidates in public health services.

**** RESEARCH METHODOLOGY
1-year postgraduate Diploma course in research methodology, leading to DRM.
Master's degree.

Note The Institute also provides short term (7-90 days) job oriented courses, as required by sponsoring organizations; some of these are: rural health for house surgeons (6 weeks), management (3 weeks), child health and family planning, social work et. It is proposed to affiliate the DRM to Madurai Kamaraj University.

IND 34 **GAUHAUTI UNIVERSITY**

Associated institutions
Medical College, Gauhati
Regional Medical College, Imphal
Silchar Meeical College, Silchar

Enquiries
Registrar, Gauhati University, Gauhati, Assam, 781014
Tel: 88412, 88415; telegram: University Gauhati

General details
1)Jul-Apr in 3 terms 2)c.46,000 3) 14 halls 4)English 5)Students from other countries have been accepted.

Relevant faculties
Medicine - Science

*** FIRST DEGREES
4½-year courses in medicine and surgery.

**** MASTER'S LEVEL
3-year courses in medical specializations.

**** DOCTORAL STUDIES
PhD requires 2 years.

**** DIPLOMA
1-year postgraduate diploma courses in anaesthesiology, bacteriology, clinical pathology, forensic medicine, nutrition, obstetrics and gynaecology, ophthalmology, otorhinolaryngology, paediatrics, public health, radiology, tropical medicine, tuberculosis and chest diseases.

Note
Founded in 1948, the university is affiliating, teaching and residential with one constituent and some 100 affiliated colleges. ETR-77

IND 35 **GOVERNMENT HEALTH VISITORS TRAINING SCHOOL**

Enquiries
Superintendent, Government Health Visitors Training School, (Nurses Quarters:Premises), Visakhapatnam, A.P. Tel: 4186

Managing agency
Director of Medical and Health Services, Hyderabad.

General details
1)Jan-Dec 2) 20 3) 13f 4)English 5)No students from other countries have so far been accepted.

Courses
** HEALTH VISITING
1-year course leading to Health Visitors Certificate and covering total health care for rural areas: maternal & child care, family planning, immunization, family health, sanitation, minor ailment treatment, home nursing and school health services.
Secondary School Certificate or matriculation, experience as auxiliary nurse/midwife.

*** HEALTH SUPERVISION
6-month course for multi-purpose health supervisor (female), to supervise the multi-purpose health visitors in rural areas.
Grade X or XI, with experience as auxiliary nurse/midwife.

Note
Students receive training in the King George Hospital paediatric and obstetrics departments, and also have field experience at the three municipal health centres chosen by the school, and in rural health centres.

The School was started during 1954 and received WHO aid until 1961. Its teaching programme is affiliated with the King George Hospital, Tuberculosis Hospital, Infectious Diseases Hospital and other government insitutions like the Regional Family Planning Training Centre, and voluntary organizations such as the Indian Red Cross Society.

IND 36 **GOVERNMENT MEDICAL COLLEGE, JAMMU**

Affiliated to the University of Jammu

Enquiries — Principal and Dean, Government Medical College and attached Hospitals, Jammu. Tel: 6824; telegram: Govmedcol

General details — 1)From Sep 2) 400 3) 117m & 82f 4)English 5)No places are reserved for foreign candidates, but a few non-nationals have been accepted in the past.

Courses

*** MEDICINE
4½-years + 1 year compulsory rotatory internship, for MBBS.
Pre-medical or its equivalent, age not less than 17 years.

**** DIPLOMA COURSES
1-year diploma courses in clinical pathology, child health, radiology, orthopaedics, gynaecology & obstetrics, and anaesthesiology.
Relevant first degree.

IND 37 **GOVERNMENT TRAINING SCHOOL FOR HEALTH VISITORS**

Enquiries — Superintendent, Government Training School for Health Visitors, Madras. Tel: 841920.

Managing agency — Department of Public Health & Preventive Medicine, Madras.

General details — 1)From Jul 2) 237 3) 237 4)Tamil 5)No students from other countries have so far been accepted.

Courses

** MIDWIFERY/HEALTH VISITING
30-month course for midwife cum health visitor.
Secondary School Leaving Certificate, age 18-35.

*** HEALTH VISITING
18-month course for health visitor, to work in primary health centres in rural areas, for implementing MCH schemes, including family welfare, immunization, school health, health education, etc.
Midwifery/ANM qualification, age at least 23 years.

IND 38 **GUJARAT UNIVERSITY**

Associated institutions
Smt. N. H. Lakhamichand Municipal Medical College (see IND 23)
Behramji Jihibhai Medical College
College of Nursing
Lond Dental College
Lallubhai Motilal College of Pharmacy
M. N. College of Pharmacy

Enquiries — Registrar, Gujarat University, Navrangpura, Ahmedabad, Gujarat 380009. Tel: 40341/4; telegram: Unigujarat

General details — 1)Jun-Mar in 2 terms 2)c.100,000 3)Yes 4)Gujarati, English and Hindi also used.

Courses

*** FIRST DEGREES
2 years for nursing science; 4 years for dental surgery and pharmacy; 5½ years for medicine and surgery.
Pre-university

**** MASTER'S LEVEL
2 years in audiology and speech pathology, microbiology, pharmacy, psychology, and numerous dental specializations; 3½-4 years for most medical specializations.
Appropriate first degree.

**** DOCTORAL STUDIES
PhD requires 2 years; DSc 2 years after PhD, or 3 years after master's.
Appropriate higher degree.

**** VARIOUS
2-year courses in anaesthetics, clinical pathology, gynaecology and obstetrics, industrical health, laryngology and otology, medical and social psychology, medical radiology and electrology, ophthalmology, paediatrics, psychiatric nursing, psychiatric occupational therapy, psychiatric social work, psychological medicine, psychotherapy, public health, special education for non-normal children, tuberculous diseases, venereology and dermatology, pharmacy.
Appropriate first degree.

Note — Founded in 1949, the university is a teaching and affiliating institution with 146 affiliated colleges and eight recognized institutions as well as the seven university schools which provide post-graduate instruction.

IND 39 — **GURU NANAK DEV UNIVERSITY**

Associated institutions — **Medical College, Amritsar**
Punjab Government Dental College and Hospital, Amritsar

Enquiries — Registrar, Guru Nanak Dev University, Amritsar, Punjab. Tel: 48711; telegram: University Amritsar

General details — 1)Jul-Apr in 3 terms with a fourth term for education degrees, and only 2 terms in dental colleges 2)c.47,500 3) 420 5)English/Hindi/Punjabi and/or Urdu in most first degree courses except in science and agriculture when English is used, as it is for most higher degrees.

Relevant faculties — Dental Sciences - Medicine - Science.

Courses

*** FIRST DEGREES
4-year courses in dental surgery; 5 years in medicine and surgery.

**** MASTER'S LEVEL
2 years in anaesthetics, anatomy, dental specializations, dermatology (including leprosy and venereology) ear-nose-and-throat, microbiology, midwifery and gynaecology, ophthalmology, orthopaedics, paediatrics, pathology, pharmacology, physiology, psychiatry, radiodiagnosis, radiotherapy, social and preventive medicine, surgery or tubercular and respiratory diseases.

**** DIPLOMA
1-year postgraduate Diploma courses in anaesthetics, child health, clinical pathology, dermatology and venereal disease, gynaecology and obstetrics, laryngology and otology, ophthalmic medicine and surgery, tubercular and chest diseases; 2 years in medical radiology.

Note — Established in 1969 to mark the 500th anniversary of the birth of Sri Guru Nanak Dev Ji, founder of the Sikh religion, the university is a teaching and affiliating institution with some 70 affiliated colleges. ETR-77

IND 40 **HAFFKINE INSTITUTE**

This is a recognized postgraduate institution of the University of Bombay

Enquiries Director, Haffkine Institute, Parel, Bombay 400012. Tel: 446341; telegram: Research, Bombay

General details 1)Oct-Jun, Nov-Mar 2) 200 3) 30m & 10f 4)English 5) 1-2 students from other countries are accepted annually.

Courses **** HIGHER DEGREES
Postgraduate degree courses are conducted in the following studies: applied biology (MSc, PhD), organic chemistry (MSc, PhD), biochemistry (MSc, PhD), microbiology (MSc, PhD), zoology (MSc, PhD), pharmacology and pharmaceutical industry (MPharm).

**** MEDICAL LABORATORY TECHNOLOGY
1-year diploma course in medical laboratory technology (DMLT).
BSc in microbiology, or chemistry or zoology as the principal subject.

**** DRUG ANALYSIS
1-year certificate courses in drug analysis - chemical or biological and microbiological methods.
BSc (chemistry), MSc (biochemistry), MSc (organic chemistry) for chemical courses; BSc (microbiology), BPharm, MSc (pharmacology), MPharm (pharmacology) for b&m.

Note The Institute also runs short term (5 months)) training certificate courses in any branch of science for BSc holders.

IND 41 **HARYANA PUBLIC HEALTH LABORATORY**

Enquiries State Bacteriologist, Haryana Public Health Laboratory, Karnal-132001.

Managing agency Haryana Health Department

General details 1)Jan-Dec 2) 30 on 1-year course 3) 25m 4)English 5)Students from other countries are acceptable.

Courses ** HEALTH ASSISTANT
6-week course for basic health worker cum vaccinator, to train assistants for rural health services in the control of malaria, B C G vaccination and other immunization programmes.
GCE 'O' level or equivalent with physics and chemistry, age 17-25.

** MEDICAL LABORATORY TECHNOLOGY
1-year course for laboratory technicians, covering haematology, clinical pathology, histopathology, parasitology, clinical pathology, blood transfusion and microbiology, and leading to Diploma in Medical Laboratory Technology.
GCE 'O' level or equivalent, with physics and chemistry, age 17-25.

Note The Laboratory in Karnal is the only laboratory doing work of public health microbiology and providing these training facilities. It has links with WHO and UNICEF.

IND 42 **HIMACHAL PRADESH UNIVERSITY**

Associated institution **Government Medical College, Simla**

Enquiries Registrar, Himachal Pradesh University, Summer Hill, Simla, Himachal Pradesh, 171005. Tel: 3919, 3673 , 3005; telegram: Himversity Simla

(Continued)

General details 1)Jul-May in 2 terms 2)c.22,000 3) 6 hostels 4)English and Hindi

Relevant faculties Medical science

*** FIRST DEGREES
5½-year courses in medicine and surgery.

Note Founded in 1970, the university is a teaching and affiliating institution with 22 affiliated colleges. ETR-77

IND 43 INDIAN INSTITUTE OF EXPERIMENTAL MEDICINE

Enquiries Director, Indian Institute of Experimental Medicine, 4 Raja Subadh Mulli Mullick Road, Jadavpur, Calcutta 32.

Courses Details not available

IND 44 INSTITUTE FOR RESEARCH IN REPRODUCTION

Enquiries Director, Institute for Research in Reproduction, Jehangir Merwanji Street, Parel, Bombay 400 012.

Managing agency Indian Council for Medical Research under the Ministry of Health and Family Welfare

General details 1)Between Jan & Mar 2) 100 3)None 4)English 5)Two students from Afghanistan have been accepted for courses so far.

Relevant departments Biochemistry - Biology - Clinical chemistry - Immunology - Genetics - Clinical endocrinology - Contraceptive research - Neuroendocrinology

Courses

**** REPRODUCTIVE BIOLOGY
3-month certificate course in redpoductive biology, covering basic aspects of reproductive physiology and fertility control.
MSc in applied biology, biochemistry or biological sciences.

**** HORMONE ASSAYS
2-month certificate course to acquaint laboratory staff and research students in newer methods of hormone assays.
MSc in biochemistry or biological sciences.

**** GENETICS
1-month certificate course covering techniques of chromosome analysis, and principles of genetics and their clinical application.
Medical postgraduate, diploma or medical degree in paediatrics, obstetrics & gynaecology, pathology, clinical pathology, or PhD in biological sciences.

**** IMMUNOLOGY
1-month certificate course in basic and applied immunology, with practical training in immunological techniques, and specialization in immunoreproduction.
MSc in the life sciences, or MBBS.

**** CONTRACEPTIVE RESEARCH AND REPRODUCTIVE ENDOCRINOLOGY
1-month course to acquaint scientists and workers involved in family planning with the latest developments in the fields of contraceptive research and reproductive endocrinology.
Medical graduates working in the field or obstetrics & gynaecology or preventive and social medicine.

Note The Institute has a metabolic clinic, an endocrinology infertility clinic, a genetic clinic, and maintains seven family health clinics in greater Bombay. Many of its sophisticated instruments have been acquired through help from Rockefoller Foundation, Ford Foundation, Swedish International Development Agency (SIDA), WHO, etc.

IND 45 **INSTITUTE FOR THE PHYSICALLY HANDICAPPED**

Enquiries: Director, Institute for the Physically Handicapped, 4 Vishnu Digamber Marg, New Delhi 110002. Tel: 276520

Managing agency: Indian Department of Social Welfare

General details: 1)Jul-Aug to May 2)c.120 3)None 4)English 5)Students have been accepted from Ghana, Malaysia, Kuwait but there is no fixed annual intake.

Courses:

*** OCCUPATIONAL THERAPY
3-year diploma course in occupational therapy, to provide personnel for hospitals, rehabilitation centres for the physically handicapped and the chronically ill.
Pre-medical, or Intermediate science, or BSc 1st year in physics, chemistry and biology or equivalent examination; age 17-20 (age limit relaxable for foreign candidates).

*** PHYSIOTHERAPY
3-year diploma course in physiotherapy, to provide personnel for hospitals, rehabilitation centres for the physically handicapped and the chronically ill.
As for Occupational therapy course, above.

Note: The Institute for the Physically Handicapped and the Physio-Occupational Therapy Institute were merged in 1975 under the name of the former.

IND 46 **INSTITUTE OF AVIATION MEDICINE, INDIAN AIR FORCE**

Affiliated to Bangalore University

Enquiries: The Commandant and Principal, Institute of Aviation Medicine, Indian Air Force, Vimanapura Post, Bangalore-560017. Tel: 51781; telegram: IAM Bangalore Aircraft

Managing agency: Ministry of Defence

General details: 1)Jan for MD, Jul for Dip 2) 7 3)For Service medical officers only 4)English 5)Students have been accepted for diploma course from Zambia, Afghanistan and Iraq; two per year.

Courses:

**** AVIATION MEDICINE
1-year postgraduate diploma course in aviation medicine; 3 years higher degree course in aviation medicine. The courses are to train practitioners and specialists, and to train graduates to undertake research, in the field of aviation medicine. Areas covered by the course are aviation, space physiology and biophysics, clinical aviation medicine, human engineering in aircraft and equipment design, flight safety and accident investigation, environmental hazards and protection in flights, research methodology.
MBBS, with one year housemanship for diploma course, and three years experience for degree course. Candidates should have some previous training/experience in aviation medicine.

IND 47 **INSTITUTE OF PHARMACY, JALPAIGURI**

Affiliated to the Pharmacy Council of India, New Delhi

Enquiries: Superintendent, Institute of Pharmacy, Jalpaiguri, West Bengal. Tel: Jalpaiguri-57

Managing agency: Health Department, State Government of West Bengal

General details: 1)Aug/Sep 2) 50 3) 50m 4)English 5)No students from other countries have so far been accepted.

Relevant departments: Chemistry - Physics - Pharmacognosy - Pharmacy - Pharmacology

Courses:

** PHARMACY
2-year diploma course in pharmacy, including academic training and not less than 3 months in approved hospital dispensaries and pharmaceutical concerns.
Matriculation, Higher Secondary, or Secondary School Leaving Certificate with any 2 science subjects from: chemistry, physics, biology, physiology, hygiene and mathematics, or equivalent, age 16-22 years.

IND 48 INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION AND RESEARCH

Affiliated to the University of Calcutta

Enquiries: Director, Institute of Postgraduate Medical Education and Research, 244 Acharya J.C. Bose Road, Calcutta-20. Tel: 44-9751

Managing agency: Department of Health and Family Welfare, Government of West Bengal

General details: 1)PG from Sep, Dip from Jul, Cert from Oct 2) 82 3)Hostel under construction 4)English 5)Students have been accepted from Afghanistan and Malaysia.

Relevant departments: Medicine - Paediatrics - Neuro-medicine - Cardiology - Obstetrics & gynaecology - Surgery - Plastic surgery - Thoracic surgery - ENT - Ophthalmology - Orthopaedics - Neuro-surgery - Pathology & bacteriology - Nuclear & experimental medical sciences - Radiology - Anaesthesiology - Physical medicine - Biochemistry

Courses:

*** MEDICAL LABORATORY TECHNOLOGY
1-year course for certificate in medical laboratory technology, to provide hospital staff.
Higher Secondary School Certificate in 2nd division or equivalent, with physics, chemistry and maths or biology.

*** RADIOTHERAPY
1-year course for certificate in radiotherapy, to provide hospital staff.
As for Medical laboratory technology course, above.

*** PHYSIOTHERAPY
2½-year course in physiotherapy, leading to diploma, to provide hospital staff.
Higher Secondary School Certificate in 2nd division or equivalent with physics, chemistry, maths and biology.

**** MASTER'S LEVEL
2-year postgraduate degree courses for MD in medicine, or obstetrics and gynaecology, and for MS in general surgery.
MBBS with 1 year continuous residential housemanship.

IND 49 INSTITUTE OF PREVENTIVE MEDICINE

Enquiries: Director, Institute of Preventive Medicine, Narayanguada, Hyderbad, Andhra Pradesh.

Courses: No details available.

IND 50 **JADAVPUR UNIVERSITY**

Enquiries: Registrar, Jadavpur University, Calcutta-700032, West Bengal. Tel: 72-4043; telegram: Jadavpur University.

General details: 1)Jul-Jun (PG Aug-Sep) in 2 terms 2) 4,222 3) 768 4)English 5) 41 students from overseas are accepted at the University annually.

Courses:

*** PHARMACY
4 years for first degree in pharmacy.

**** PHARMACY
2 years for master's degree in pharmacy.
First degree in pharmacy.

IND 51 **JAWAHARLAL INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION AND RESEARCH**

Affiliated to the University of Madras

Enquiries: Director, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry-605006. Tel: 3001; telegram: Jipmer; telex: 0459 244.

Managing agency: Ministry of Health and Family Welfare

General details: 1)From Jun-Jul 2) 543 3)Yes 4)English 5)Up to 15 students from other countries are accepted for MBBS course.

Relevant departments: Physics - Chemistry - Biology - Anatomy - Physiology - Biochemistry - Pharmacology - Pathology - Microbiology - Forensic medicine - Ophthalmology - Psychological & social medicine - General medicine - Obstetrics & gynaecology - Surgery

Courses:

*** FIRST DEGREES
3 years for BSc in medical laboratory technology; 5 years for medicine and surgery.
PUC of the University of Madras, or other recognized equivalent provided that an approved standard of physics, chemistry and natural sciences can be offered.

**** MASTER'S LEVEL
2 years for MD with specializations in anaesthesiology, biochemistry, pathology, pharmacology, obstetrics & gynaecology, paediatrics, pathology, pharmacology, physiology, microbiology, general medicine; 2 years for MS in anatomy, ENT and general surgery; 3 years for MSc in biochemistry.
Appropriate first degree

**** VARIOUS
1 year postgraduate diploma courses in medical radiology diagnosis, anaesthesiology, ophthalmology, gynaecology & obstetrics, child health, orthopaedics.
Appropriate first degree with not less than one year of housemanship.

**** DOCTORAL STUDIES
3-4 years for PhD
Appropriate postgraduate qualifications.

Note: The Institute also conducts a National Teacher Training Course with the assistance of WHO, a short term paediatrics refresher course and a similar course in orthopaedics.

IND 52 **JIWAJI UNIVERSITY**

Associated institution: **Gajira Raja Medical College, Gwalior**

Enquiries: Registrar, Jiwaji University, Vidya Vihar, Gwalior, Madhya Pradesh, 474002. Tel: 20095; telegram: University Gwalior

General details 1)Jul-Jun in 3 terms 2)c.34,600 including c.29,000 in affiliated colleges

Relevant faculties Home science - Life sciences - Medicine

Courses

*** FIRST DEGREES
3-year courses in life science; 5 years in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in medicine and surgery

DOCTORAL STUDIES
PhD requires 2 years.

**** DIPLOMA
1-year postgraduate Diploma courses in child health, clinical pathology, gynaecology and obstetrics, laryngology and otology, medical radiology and electrology, ophthalmic medicine and surgery, orthopaedics.

Note Founded in 1964, Jiwaji is a teaching and affiliating university with 38 affiliated colleges. ETR-77

IND 53 KARNATAK MEDICAL COLLEGE, HUBLI

Affiliated college of Karnatak University

Enquiries The Registrar, Karnatak University, Dharwar, Karnataka 580003. Tel: 8194; telegram: Unikarnatak

General details 1)Jul-Mar 2) 2,759 3) 597m & 120f 4)English and Kannada 5) 44 students annually are admitted, from Sri Lanka, Fiji Islands, Iran, Malaysia, Nepal, Bhutan, Afghanistan, USA.

Courses

** NURSING
3½-year certificate course in general nursing, plus 6 months training in midwifery.
Standard X (Secondary School Certificate)

** HEALTH AND FAMILY WELFARE
Various courses for medical and paramedical staff.
In-service candidates

*** FIRST DEGREE
4½ years in medicine, leading to MBBS.
Standard XII (PUC II year).

MASTER'S LEVEL
3 years for MD in anaesthesiology, medicine, microbiology, obstetrics and gynaecology, paediatrics, pathology, physiology; and for MS in anatomy, ENT, orthopaedics, surgery.

**** DIPLOMA COURSES
2-year postgraduate diploma courses in anaesthetics, child health, clinical pathology, gynaecology and obstetrics, laryngology and otology, ophthalmology, orthopaedics, pharmacology, tubercular and chest diseases, venerealogy and dermatology, medical radio diagnosis.
Relevant first degree

IND 54 KING INSTITUTE OF PREVENTIVE MEDICINE

Enquiries Director, King Institute of Preventive Medicine, Guindy, Madras-600032. Tel: 431026; telegram: Institute Madras

Managing agency Ministry of Health & Family Welfare, Tamil Nadu

General details 1)Jan-Dec 2) 17-25 3)None 4)English 5)No students from other countries have so far been accepted.

Relevant departments: Microbiology

Courses:
*** LABORATORY TECHNOLOGY
1-year certificate course in laboratory technology, to provide technicians in hospitals and medical colleges.
Pre-university pass with science subjects, age 18-23 years.

IND 55 K.M. SCHOOL OF POSTGRADUATE MEDICINE AND RESEARCH, AHMEDABAD

Recognized institution of the University of Gujarat

Enquiries: Director, K.M. School of Postgraduate Medicine and Research, Ellis Bridge, Ahmedabad-380006. Tel: 77621/22/23/24/25

General details: 1)Jan-Jun and Jul-Dec 2) 405 3)Yes 4)English 5)No students from other countries have so far been accepted

Courses:
**** MASTER'S LEVEL
3-years for MD with following specializations: general medicine & therapeutics, pathology & bacteriology, obstetrics & gynaecology with diseases of infancy, paediatrics, anaesthesia, radiology, dermatology, psychological medicine; and for MS in general surgery, ENT surgery, orthopaedics, ophthalmology.
MBBS of Gujarat University; graduates of other universities are required to obtain eligibility certificate for Gujarat University.

**** VARIOUS
2-year postgraduate diploma courses in clinical pathology, obstetrics & gynaecology; anaesthesia; paediatrics; medical radiology & electrology venereology & dermatology; laryngology & otology; ophthalmology; psychological medicine.
As for higher degree courses, above.

Note: Four municipal general hospitals are attached to this Institution: Sheth V.S. General Hospital & Chinai Maternity Hospital; Sheth L.G. General Hospital; Smt. S.C.L. Municipal General Hospital; Sheth Nagri Ophthalmic Hospital. The school and hospitals are affiliated to the Gujarat University for postgraduate teaching, and degrees obtained are recognized by the Medical Council of India.

IND 56 KURNOOL MEDICAL COLLEGE

Affiliated to the Sri Venkateswara University

Enquiries: Principal, Kurnool Medical College, Kurnool, Andhra Pradesh. Tel: 102; telegram: Medcollege

Managing agency: State Government

General details: 1)Jan-Dec, Jun-Apr 2) 795 3)Some 4)English 5)Two students from overseas countries are accepted annually

Relevant departments: Anatomy - Physiology - Biochemistry - Pharmacology - Pathology - Forensic medicine - Social and preventive medicine - Medicine - Surgery - Obstetrics & gynaecology

Courses:
*** FIRST DEGREE
5½ years for MBBS, including 1 year compulsory rotating internship.
Intermediate or its equivalent (12 years schooling), age 16-22.

**** MASTER'S LEVEL
3 years for MD in physiology, biochemistry, pharmacology, pathology, microbiology, general medicine, obstetrics & gynaecology, paediatrics and anaesthesiology; and for MS in anatomy, ENT, ophthalmology, orthopaedics and general surgery.
MBBS with preference to those with post qualification service

**** VARIOUS
2-year postgraduate diploma courses in pathology, gynaecology & obstetrics, radiology, laryngology & otology, ophthalmology, anaesthesiology, child health, forensic medicine, tubercular and chest diseases.
MBBS

IND 57 **LEPROSY SANATORIUM**

Enquiries: Superintendent, Leprosy Sanatorium, Nooranad Sanatorium P.O., Alleppey District, Kerala State 690504. Tel: 31 (Nooranad).

Managing agency: Kerala Health Services

General details: 1)First 14 days of each month 2) 132 3)Yes 4)English and Malayalam 5)No students from other countries have so far been accepted, but this is not ruled out.

Courses:
**** LEPROSY CARE
Short-term (14 days) courses of training in leprosy for medical officer trainees.
Medical officers of Health Services Department

IND 58 **LEPROSY TRAINING CENTRE**

Enquiries: Civil Surgeon, Leprosy Training Centre, Nooranad Sanatorium P.O., Alleppey District, Kerala State, 690504. Tel: 31 (Nooranad).

Managing agency: Kerala Health Services

General details: 1)Varies 2)c.190 3)For short course students only 4)English and Malaylam 5)No students from overseas have so far been accepted but acceptance is not ruled out.

Courses:
** LEPROSY CARE
6-month certificate course for leprosy health visitor.
Secondary School Leaving Certificate, with some experience in social work; age 18-30.

*** LEPROSY CARE
10-day courses (12 per annum) in leprosy care for paramedical supervisory staff of health departments.
Mainly in-service course for departmental staff.

Note: Certain teaching aids - such as charts, models, slide projector, books, microscopes, etc. - have been supplied by UNICEF.

IND 59 **MADURAI UNIVERSITY**

Associated institutions:
Gandhigram Institute of Rural Health and Family Planning (see IND 33)
Madurai Medical College
Tirunelveli Medical College (see IND 128)

Enquiries: The Registrar, Madurai University, Palkalai Nagar, Madurai, Tamil Nadu, 625021.

IND 60 **MAGADH UNIVERSITY**

Associated institutions:
Magadh Medical College, Gaya
Nalanda Medical College, Kanker Bagh
Rajendra Memorial Research Institute of Medical Science, Patna

Enquiries — Registrar, Magagh University, Bodh-Gaya, Bihar, 824234.
Tel: Bodh-Gaya 31; telegram: Magversity Bodh-Gaya Bihar

General details — 1)Jun-May in 3 terms 2)c.36,000 including 29,000 in affiliated colleges 4)English and Hindi 5)Students from other countries are accepted.

Relevant faculties — Medicine

Courses

*** FIRST DEGREES
4½-year courses in medicine and surgery

**** MASTER'S LEVEL
4-year courses in medicine or pathology, including 1 year's housemanship.

**** DOCTORAL STUDIES
PhD requires 2 years, and DSc 3 to 6 years.

Note — Founded in 1962, the university has three constituent and 38 affiliated colleges, as well as its own teaching departments. Rajendra Memorial Research Institute of Medical Science, Patna, is a recognized post-graduate institution of the university. ETR-77

IND 61 MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

Associated institution — **Baroda Medical College**

Enquiries — Registrar, Maharaja Sayajirao University of Baroda, Baroda, Gujarat, 390002. Tel: 64238, 64442; telegram: University Baroda

General details — 1)Jun-Apr in 2 terms 2)c.24,000 3)3,500 4)English 5)Students from other countries are accepted.

Relevant faculties — Home science - Medicine

Courses

*** FIRST DEGREES
4-year courses in home science, pharmacy; 5½ years in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in public health, foods and nutrition, microbiology; 3 years in most medical specializations, although some require 3½ years.

**** DOCTORAL STUDIES
PhD requires 2 years.

**** DIPLOMA
1-year postgraduate Diploma courses in dietetics; 2 years in public health and a number of other medical specializations.

Note — Founded in 1949, the university is a unitary, teaching and residential institution with eight constituent and one recognized institution. ETR-77

IND 62 MAHATMA GANDHI INSTITUTE OF MEDICAL SCIENCES

Affiliated to Nagpur University

Enquiries — Principal, M.G. Institute of Medical Sciences, P.O. Sevagram, Wardha 442102. Tel: 2701/5; telegram: Care Hospital, Sevagram

Managing agency — Kasturba Health Society

General details — 1)From Aug 2) 60 p.a. 3) 300m & 100f 4)English 5)A small quota of students accepted annually from other countries, including Angola, Guyana, Mauritius, Nepal, Gulf states.

Courses

*** FIRST DEGREES
4½-year course plus 1 year compulsory rotating internship training, for MBBS.
Standard XII or equivalent

**** MASTER'S LEVEL
2-year higher degree course in community medicine.
MBBS, with satisfactory experience or further qualification

**** DOCTORAL STUDIES
PhD takes two years after master's degree (biochemistry).
MSc biochemistry, preferably with research or teaching experience.

IND 63 MARATHWADA UNIVERSITY

Associated institution

Medical College, Aurangabad

Enquiries

Registrar, Marathwada University, University Campus, Aurangabad, Maharashtra 431001. Tel: 3721/4; telegram: Marathsity Aurangabad (Deccan)

General details

1)Jun-Mar or Apr in 2 terms 2)c.75,000 3) 50 women (postgraduate) 4)English and Marathi; English only for science and postgraduate courses 5)Students from other countries are accepted.

Relevant faculties

Medicine

*** FIRST DEGREES
4½-year courses in medicine and surgery.

**** MASTER'S LEVEL
3 year courses in anatomy, general surgery, medicine, obstetrics and gynaecology, ophthalmology, orthopaedics, pathology, pharmacology, physiology, or preventive and social medicine.

**** DOCTORAL STUDIES
PhD takes 2 years.

**** DIPLOMA
1-year postgraduate Diploma courses in anaesthetics, child health, clinical pathology, gynaecology and obstetrics, medical radiodiagnosis, ophthalmic medicine and surgery, public health.

Note

Founded in 1958, this teaching and affiliating university has 81 affiliated colleges as well as its own teaching departments. ETR-77

IND 64 MEERUT UNIVERSITY

Associated institution

Lala Lajpai Rai Memorial Medical College

Enquiries

Registrar, Meerut University, Meerut, Uttar Pradesh, 250001. Tel: 74426; telegram: University Meerut

General details

1)Jul-Jun in 2 semesters 2) 52,179 3) 120 4)English or Hindi

Relevant faculties

Medicine

Courses

*** FIRST DEGREES
5-year courses in medicine and surgery

**** MASTER'S LEVEL
2-year courses in medicine and surgery

Note

Founded in 1965, this is a teaching and affiliating university with one constituent and 53 affiliated colleges. ETR-77

IND 65 **MIRAJ MEDICAL COLLEGE**

Affilated to Shivaji University

Enquiries

Principal, Miraj Medical College, Miraj, Sangli District, Maharashtra 416410. Tel: 695

Managing agency

State Government

General details

1)Jun & Nov 2) 530 3) 306m & 39f 4)English 5)Two students from overseas are accepted annually.

Relevant departments

Medicine - Surgery - Medical gynaecology

Courses

*** FIRST DEGREE
4½ years plus 1 year compulsory internship training for MBBS.
Standard XII (Science) exam.

**** MASTER'S LEVEL
3 years for MD and for MS for MBBS holders; 3 years for MSc (Anatomy/Physiology/Pharmacology) for those with BSc or MSc.
Appropriate first degree

**** VARIOUS
2-year postgraduate diploma courses, leading to DCP, DTCD, DGO, DCH or DA.
Appropriate first degree.

IND 66 **MODEL VITAL & HEALTH STATISTICS UNIT, NAGPUR**

Enquiries

Director, CBHI, Dte. General of Health Services, Nirman Bhavan, New Delhi. Tel: 375650

Managing agency

Ministry of Health and Family Welfare

General details

1)Varies (c. 4 courses a year) 2) 50 3)None 4)English 5)Students from other countries are accepted, no fixed limit.

Courses

** HEALTH STATISTICS
10-week certificate course in vital and health statistics.
Matric/Higher secondary certificate. Candidates should be employed in a State Health Directorate.

** MEDICAL CODING
12-week certificate course in medical coding.
As for Health statistics course, above.

Note

The institution was established in 1956 in collaboration with the Municipal Corporation of Nagpur to improve and demonstrate the usefulness of vital and health statistics in an urban area.

IND 67 **NAGPUR UNIVERSITY**

Associated institutions
Government Dental College, Nagpur
Medical College, Nagpur
Mahatma Gandhi Institute of Medical Sciences, Sewagram (see IND 62)

Enquiries
Registrar, Nagpur University, Tagore Marg, Nagpur, Maharashtra 440001
Tel: 22417; telegram: Nagpur University

General details
1)Jun-Mar/Apr in 2 semesters 2)c.99,600 including 95,700 in affiliated colleges 3) 410 4)English, Hindi and Marathi 5) 114, mainly from Malaysia

Relevant faculties
Engineering and technology - Home science - medicine

Courses
*** FIRST DEGREES
3-year courses in home science, occupational therapy, physiotherapy; 4 years in pharmacy; 5 years in dentistry, 5½ years plus 12 months internship in medicine and surgery

****
MASTER'S LEVEL
2-year courses in food and nutrition, pharmacy, public health engineering; 2 years including six months clinical practice in anatomy, medicine, obstetrics and gynaecology, ophthalmology, pathology and bacteriology, pharmacology, physiology; plastic surgery or social and preventive medicine.

**** DOCTORAL STUDIES
PhD takes 2 years, DSc 3 years after master's.

**** DIPLOMA
1-year postgraduate courses in anatomy, gynaecology and obstetrics, child health, medical radiodiagnosis, ophthalmology, tubercular diseases.

Note
Founded in 1923, this is a teaching and affiliating university with three constituent and 134 affiliated colleges. ETR-77

IND 68 **NATIONAL INSTITUTE OF COMMUNICABLE DISEASES**

Enquiries
Director, National Institute of Communicable Diseases, 22 Sham Nath Marg, Delhi 110054. Tel: 221531; telegram: Comdis, Delhi.

Managing agency
Ministry of Health & Family Welfare, Gov. of India

General details
1)Varies 2)c. 520 3) 60 4)English 5)About 15 students for regular course and 50 for ad hoc courses are accepted from all over the world.

Relevant departments
Epidemiology - Microbiology - Malariology - Medical entomology - Filiariology - Zoonosis - Biochemistry - Polio-vaccine testing.

Courses
**** EPIDEMIOLOGY/COMMUNICABLE DISEASES
72-working days for national course in epidemiology and control of communicable disease, leading to certificate.
Medical officers, veterinarians or scientists in associated disciplines from health departments of various organizations, research and teaching institutions in India and abroad.

**** EPIDEMIOLOGY/COMMUNICABLE DISEASES
3-months in Prague followed by 3 months in Delhi for WHO inter-regional training course in epidemiology and control of communicable diseases, with special emphasis on the epidemiology and operational measures against malaria, filaria, haemorrhagic fevers, leprosy, tuberculosis, plague, cholera, smallpox, poliomyelitis and trachoma.
Candidates for the course are sponsored by various governments of developing countries and the selection is made by the WHO.

**** MALARIOLOGY
36-working days for national course in malariology for medical and unit officers of National Malaria Eradication Programme, leading to certificate.
Medical officers and biologists participating in the Programme or deputed by states, defence and railway health organizations.

**** MALARIOLOGY
36-working days for WHO course in malariology, leading to certificate.
Public health administrators, health officers, staff members from social and preventive medicine departments in medical colleges, and rural health workers associated with malaria programmes.

**** ENTOMOLOGY
65-working days for certificate course in advanced medical entomology for biologists and medical graduates involved in the investigation and control of vector-borne diseases.
Candidates from the states, defence services, railways, medical colleges and universities, international and allied organizations.

**** FILARIOLOGY
Three courses in filariology comprise: 30 working days for medical officers and biologists from states and other health organizations; 20 working days for filaria inspectors, covering methods of determination of infection, disease rate and relevant control measures; and 5 working days for administrative medical officers at district levels and above.
Medical officers and biologists, inspectors, and administrative medical officers working in the area of filaria control.

Note

The Institute also runs an 8-day course in the use and maintenance of jet injectors, and a number of ad hoc courses for students of preventive and social medicine, community health, nursing and health education; it organizes regular seminars for personnel from national health programmes and other organizations in India and abroad, on subjects such as cholera control, laboratory diagnosis of smallpox, and malaria eradication. The Institute has a branch located at Coonoor, and there are three filariasis training and research centres functioning at Calicut, Rajahmundry and Varanasi.

The Institute has links with the WHO, which sponsors certain courses; it is also recognized for postgraduate research work for the award of the degrees of PhD and DSc by the Inter-University Board.

IND 69 NATIONAL INSTITUTE OF HEALTH ADMINISTRATION AND EDUCATION

Enquiries

Director, National Institute of Health Administration and Education, E-16 Greater Kailash, New Delhi 110001

General details

1)Varies 3)Yes 4)English 5)Yes (see note)

Courses

**** HEALTH ADMINISTRATION
2-year postgraduate degree course for MD (Health Administration).
Appropriate first degree, preferably with relevant experience.

**** HEALTH ADMINISTRATION
2-month staff college course, covering national and community priorities and problems related to health services and their administration; 4-week hospital administration course; 4-week health planning course.
Health administrators at the district level and above.

Note

The institute is assisted by WHO, UNDP, UNICEF and DANIDA; it is willing to design a course suitable for health administrators in any developing country on the basis of consultations with the appropriate authorities of the country concerned.

IND 70 **NATIONAL INSTITUTE OF HEALTH AND FAMILY WELFARE**

Enquiries: Director, National Institute of Health and Family Welfare, L-17 Green Park, New Delhi-110016. Tel: 666562; telegram: Swasth Parivar

Managing agency: Ministry of Health & Family Welfare

General details: 1)Varies 2)c. 20 per course 3) 70 (m&f) 4)English 5)The Institute is willing to design a course suitable for health administrators in any developing country on the basis of consultations with the appropriate authorities of the country concerned.

Courses:

**** HEALTH ADMINISTRATION/FAMILY WELFARE COMMUNICATION
A course on research methodology for health administrators (about 1 month), and one on research methodology in family welfare communication (about 3 weeks, sponsored by UNESCO).

**** BIO-STATISTICS & DEMOGRAPHY
Training programme for statisticians in bio-statistics and demography (2-3 weeks).

**** HOSPITAL ADMINISTRATION
Hospital administration course (3-4 weeks), and courses on materials management in hospitals (1 week).

**** MEDICAL & HUMAN GENETICS
3-month training course on medical and human genetics.

Note: The Institute offers a wide variety of courses, of which those above are only a selection. Facilities are also provided for research work leading to doctorate degree in reproductive bio-medicine. A diploma course in hospital administration is planned to begin in April 1979.
The Institute is assisted by WHO, UNDP, UNICEF and DANIDA.

IND 71 **NATIONAL INSTITUTE OF MENTAL HEALTH & NEURO SCIENCES**

Affiliated to Bangalore University

Enquiries: Director, National Institute of Mental Health and Neurosciences, P.B. No. 2779, Bangalore-560029. Tel: 42121-8; telegram: Nimhans

Managing agency: Autonomous body funded by Government of India and Government of Karnatake.

General details: 1)From 1st July 2) 141 3) 55m & 32f 4)English 5)Students from other countries are accepted; no fixed number.

Courses:

*** PSYCHIATRIC NURSING
11 months for diploma in psychiatric nursing.
Registered nurses with general nursing experience

**** PSYCHOLOGICAL MEDICINE
2 years for diploma in psychological medicine (DPM); 3 years for MD degree in psychological medicine.
For diploma: medical graduate from recognized university; for master's degree, MBBS with satisfactory completion of 1 year compulsory rotating internship.

**** NEUROLOGY/NEUROSURGERY
4 years for DM degree in neurology; 4 years for MCh degree in neurosurgery
MBBS with full registration and 1 year senior housejob experience

**** PSYCHIATRIC SOCIAL WORK
2 years for MPhil in psychiatric social work.
MA in social work

CLINICAL PSYCHOLOGY
2 years for MPhil in medical and social psychology; 3 years for PhD in clinical psychology
For MPhil, MA degree in psychology with experimental psychology as one of the subjects; for PhD, first class master's degree in psychology, or DM&SP

IND 72 **NATIONAL INSTITUTE OF NUTRITION**

Enquiries: Director, National Institute of Nutrition, Indian Council of Medical Research, Hyderabad-500 007. Tel: 71909; telegram: Nutrition

Managing agency: Indian Council of Medical Research

General details: 1)Varies 2) 60 3) 24 (m&f) 4)English 5) 12 students annually are accepted from other countries, including S E Asia, Western Pacific and Middle East countries.

Relevant departments: Clinical - Genetics - Reproductive physiology - Endocrinology & metabolism - Biophysics - Instrumentation - Pathology - Biochemistry - Analytical chemistry - Food & drug toxicology - Field studies - Extension & training - Dietetics - Statistics - Animal Information services.

Courses:

**** NUTRITION
3-month certificate course in nutrition for teachers in medical colleges; 2-month certificate course in nutrition for teachers in agricultural universities.
For 3-month course, basic medical degree, postgraduate qualifications like DPH, MD preferred; for 2-month course, master's degree in home science, veterinary or agricultural sciences.

**** APPLIED NUTRITION
9-month course for teachers in medical colleges, leading to MSc (Applied Nutrition) of Osmania University.
Basic medical degree or postgraduate degree in science.

**** ENDOCRINOLOGY
2-month certificate course covering endocrinological techniques and their application, for senior teachers and scientists from medical colleges and biomedical research centres in India and neighbouring countries.
MBBS or MSc (Biochemistry)

**** BIOCHEMISTRY
Advanced training course (varying in duration) leading to PhD Biochemistry in the Medical Faculty of Osmania University.
MD (Biochemistry)

**** BIOMEDICAL RESEARCH
Course of training, organized on ad hoc basis, in the use of radioactive isotopes in biomedical research.

Note: The Institute is recognized as a leading centre of research into nutrition in the country, and has been the venue of many national seminars and workshops, and international seminars and symposia. WHO sponsors fellows from the S E Asian and Middle East countries, and, with UNICEF, supports the participation of guest lecturers from various parts of India and South-East Asia. The Institute runs a range of other courses.

IND 73 NATIONAL INSTITUTE OF VIROLOGY

Enquiries: Director, National Institute of Virology, 20-A Dr Ambedkar Road, Pune - 411001. Tel: 23471/23472; telegram: Virology, Pune; telex 0145 328

Managing agency: Indian Council of Medical Research

General details: 1)Diploma course Jul-Jun, others vary 2)Not fixed 3)None 4)English 5)WHO fellows, mainly from South East Asia, are accepted, as deputed.

Courses:

**** MEDICAL VIROLOGY
1-year postgraduate diploma course in medical virology (DMV - Poona University)
Relevant degree - eg, MD, MBBS, MSc or MVSc - with 2 years experience in medical microbiology laboratory.

**** LABORATORY MOUSE BREEDING
2-week postgraduate certificate course in the breeding and maintenance of laboratory mice.
Relevant degree - BVSc, MVSc, MSc, BSc, MBBS, etc - with practical managerial experience in laboratory animals.

**** TISSUE CULTURE
2-week certificate (refresher) course in tissue culture.
Graduate with long experience; candidates to be sponsored should be scientists holding whole time post in medical college/research institute/university etc, with adequate experience in tissue culture.

**** TISSUE CULTURE
2-week workshop on techniques and applications of tissue culture, offering an introduction to specialized methods in the application of tissue culture, and leading to certificate.
As for Tissue culture (refresher) course, above.

IND 74 NATIONAL TUBERCULOSIS INSTITUTE

Enquiries: Director, National Tuberculosis Institute, 8 Bellary Road, Bangalore 560003. Tel: 31192-93; telegram: Natubinst, Bangalore

Managing agency: Ministry of Health & Family Welfare

General details: 1)Varies 2) 208 3) 120 4)English 5)Students from other countries are accepted, no fixed number but 35 received training in 1977.

Relevant departments: Control - epidemiology - Sociology - Bacteriology - X-Ray engineering - Statistics

Courses:

*** TUBERCULOSIS CONTROL
1-10 day courses of orientation in tuberculosis control programmes.
Medical undergraduates, interns, nurses, general practitioners, etc.

*** PUBLIC HEALTH NURSING
4-week Certificate course to give teaching in the practical role played by public health nurses in tuberculosis programmes.
Qualified public health nurses.

**** TUBERCULOSIS CONTROL PROGRAMMES
13-week certificate course for district tuberculosis centre personnel comprising theoretical classes in the planning of tuberculosis control programmes, dummy teaching and field work. Also 13-week certificate course for state TB centre personnel, to impart practical experience in supervision, monitoring, assessment of programme teaching methodologies and research design.
District personnel course is for medical officers, qualified health visitors, laboratory technicians, X-ray technicians, and statistical assistants. State personnel course is a more advanced programme for qualified district personnel with field experience.

**** PAEDIATRICS
5-day course, discussing the epidemiology and the control of tuberculosis with particular reference to tuberculosis problems in childhood. This course is held in October every year and is part of WHO/UNICEF course held at the Institute of Child Health, London.
Graduates in medicine and sponsored by WHO/UNICEF.

**** TUBERCULOSIS CONTROL
Individual placements of WHO fellows from developing countries, varying in length from one week to 3 months, to acquaint them with India's NTP so as to equip them to apply it in their own country.
Graduates in medicine, medical officers and other qualified personnel, sponsored by WHO.

Note — The Institute was established with the assistance of WHO/UNICEF, and has formulated India's National Tuberculosis Programme. It is now engaged in training medical and paramedical programme workers in methodology and undertakes research to evolve programmes.

IND 75 — **NEHRU INSTITUTE OF OPHTHALMOLOGY & RESEARCH**

Affiliated to the University of Kanpur

Enquiries — Director, Nehru Institute of Ophthalmology & Research, Sitapur - 261001. Tel: 270; telegram: Cmoeye

Managing agency — Sitapur Eye Hospital Trust (Charitable Foundation)

General details — 1)Jan-Dec 2) 15 3)Yes 4)English 5)No students from other countries have so far attended, but this is not ruled out.

Courses — **** OPHTHALMOLOGY
1-year postgraduate diploma course in ophthalmic medicine and surgery.
MBBS from a recognized university or its equivalent plus 1 year housemanship (or accepted equivalent).

Note — See also IND 123

IND 76 — **NURSING AND COMMUNITY HEALTH**

Enquiries — Indian Nursing Council, Combined Council Building, Kotla Road, Temple Lane, New Delhi 110001

Note — The Indian Nursing Council is responsible for recognizing schools and colleges of nursing and lays down minimum standards and course requirements. It also maintains a register of qualified nurses. There are 15 State registration councils. State governments and the institutions are responsible for implementing programmes recognized by the Indian Nursing Council.

With such a high number of institutions throughout India offering nurse training facilities (600 nursing schools and colleges and all major hospitals) it is not possible to list these individually. (But see also IND 7, IND 27, IND 33, IND 35, IND 37, IND 53)

Courses

* COMMUNITY HEALTH
3-month course for Community Health Workers (CHW) in community health, including basic treatment for minor ailments. This is a new programme which started in 1977, and 750 primary health centres in 70 districts have been selected to conduct courses.
Primary education.

* COMMUNITY NURSING
2½-year course in general nursing and midwifery, for Auxiliary Nurse Midwife (ANM). There are 312 schools with an annual output of 5,200 trainees.
Minimum of full primary education; grade X preferred.

** HEALTH VISITING
2½-year course for Lady Health Visitor. The Indian Nursing Council has recommended discontinuation of this programme, which is now being conducted by only 24 schools, and its replacement by a course in public health nursing.
Secondary or high school leaving certificate (grade X).

** COMMUNITY HEALTH
2-year in health and family welfare services, including first-aid and treatment of minor ailments, to train Multi-Purpose Workers (MPW) to deliver an integrated health service in rural areas. This is a new programme and courses have been started in a number of States.
Secondary or high school leaving certificate (grade X).

** NURSING
3-year certificate course in general nursing, for Registered Nurse. This course is available at 359 Schools of Nursing.
Secondary or high school leaving certificate or equivalent (grade X).

*** MIDWIFERY
3-9 month course in midwifery for Registered Midwife. In some States this is an optional course following the Registered Nurse course above, in other States it is a compulsory continuation. This course is available at 125 Schools of Nursing/Midwifery.
Registered Nurse.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

IND 77-105 NURSING - GRADUATE, POSTGRADUATE AND SPECIALIZATION COURSES

The post-basic/advanced nursing courses listed below (a-p) take place at a number of institutions throughout India. These institutions are listed individually (IND 77-105) and an indication is given of which courses they can offer. (See also IND 116 and IND 117)

(a) *** NURSING
4-year course in general nursing for BSc Nursing.
Higher secondary certificate/university entrance, preferably with science subjects.

(b) *** NURSING
2-year course in general nursing for BSc Nursing.
Registered Nurses with three years bedside nursing experience.

*** NURSING SPECIALIZATIONS
Post-basic certificate/diploma courses for general nurses include:
(c) Community health and family planning - 6 months
(d) General nurse tutor - 9 months (3 years as staff nurse)
(e) Midwifery tutor - 10 months (2 years experience)
(f) Nursing administration - 9-10 months (2 years experience)
(g) Nursing education - 10 months (2 years experience)
(h) Operating theatre techniques - 6 months
(i) Ophthalmic nursing - 6 months (1 year bedside experience)
(j) Orthopaedic nursing - 6 months
(k) Paediatrics - 12 months
(l) Paediatrics refresher course - 3 months
(m) Psychiatric nursing - 11 months (2 years experience)
(n) Public health nursing - 10 months (2 years experience)
(o) Ward sister - 3 months (2 years as staff nurse)
Qualified experienced nurses (minimum experience requrements shown in brackets).

(p) **** NURSING
2-5 years for doctorate in nursing, MN or MSc in nursing.
Appropriate first degree, usually with post BSc experience.

IND 77 **All India Institute of Hygiene and Public Health, Calcutta, W Bengal**
(n). (See also IND 3)

IND 78 **All India Institute of Medical Sciences, New Delhi**
(b), (o). (See also IND 4)

IND 79 **Armed Forces Medical College, Poona 1, Maharashtra**
(a). (See also IND 144)

IND 80 **B.J. Medical College, Ahmedabad 16, Gujarat**
(b)

IND 81 **Catherine Booth Hospital, Nagarcoil, Tamil Nadu 629001**
(h), (j).

IND 82 **C.M.C. Hospital, Ludhiana, Punjab**
(a), (i)

IND 83 C.M.C. Hospital, Vellore, Tamil Nadu
(a), (b), (c), (i), (p). (See also IND 27)

IND 84 College of Nursing, Fort Bangalore, Karnataka State
(a), (b).

IND 85 College of Nursing, Hyderabad, Andhra Pradesh
(a), (b).

IND 86 College of Nursing, Indore, Madhya Pradesh
(a), (b).

IND 87 College of Nursing, Jaipur, Rajasthan
(a). (See also IND 145)

IND 88 College of Nursing, Trivandrum, Kerala
(b), (o).

IND 89 G.S.V.M. Medical College Hospital, Kanpur, Uttar Pradesh
(b).

IND 90 Health School, Nagpur 440001, Maharashtra
(n)

IND 91 Holy Family Hospital, P.O. Jamia Nagar, Okhla, New Delhi 110025
(o).

IND 92 J.J. Group of Hospitals, Bombay, Maharashtra
(b), (k).

IND 93 Lady Reading Health School, Bara Hindu Rao, Delhi 110006
(d), (n), (o).

IND 94 Leelabai Thackersey College of Nursing, S.N.D.T. Women's University, 1 Nathibai Thackersey Road, Bombay 400001
(a), (p). (See also IND 122).

IND 95 Lisie Hospital, Ernakulam, Cochin-18, Kerala State
(o) - course conducted for candidates from Mission Hospitals only.

IND 96 Madras Medical College Hospital, Madras, Tamil Nadu
(b).

IND 97 M.I.B.E. Graduate School of Nursing, Indore, Madhya Pradesh
(d), (n), (o).

IND 98 National Institute of Mental Health & Nuero Sciences, Bangalore 560001, Karnataka
(m). (See also IND 71).

IND 99 New Civil Hospital College of Nursing, Ahmedabad, 380001, Gujarat
(n)

IND 100 Postgraduate Institute College of Nursing, Sector 12, Chandigarh
(a), (b), (l), (p). (See also IND 110).

IND 101 Rajkumari Amrit Kaur College of Nursing, Andrews Ganj, New Delhi 110049
(a), (e), (f), (g), (o), (p).

IND 102 Regional College of Nursing, Gauhati, Assam
(a).

IND 103 Rejendra Medical College, Ranchi, Bihar
(a)

IND 104 Safdarjung Hospital, Ansari Nagar, New Delhi
(j). (See also IND 129)

IND 105 S.S.K.M. Hospital College of Nursing, Calcutta, West Bengal
(a)

IND 106 **OSMANIA UNIVERSITY**

Associated institutions
Gandhi Medical College, Nyderabad
Government College of Nursing Hyderabad (see IND 85)
Institute of Medical Sciences, Osmania
Medical College, Hyderabad

Enquiries
Registrar, Osmania, University, Hyderabad, Andhra Pradesh, 500007.
Tel: 71251; telegram: University Hyderabad Deccan 500007

General details
1)Jun-Apr in 2 terms (engineering and technology Jun-Mar)
2)c.65,000 including 50,000 in affiliated colleges 3) 1,279
4)English 5)Students from other countries are accepted.

Relevant faculties
Medicine - Science - Technology

Courses
*** FIRST DEGREES
4-year courses in dentistry and in nursing; 5 years in medicine and surgery, or technology

**** MASTER'S LEVEL
3-year courses in applied nutrition, genetics, microbiology, technology of fine chemicals and pharmaceuticals; 3 years in anaesthesiology, anatomy, bacteriology (including pathology), biochemistry, forensic medicine, general medicine, general surgery, nutrition, obstetrics and gynaecology, ophthalmology, otorhinolaryngology, paediatrics, pathology, pharmacology, physiology or radiology.

**** DOCTORAL STUDIES
PhD requires 2 years

**** DIPLOMA
2-year postgraduate Diploma courses in anaesthesiology, child health, clinical pathology, forensic medicine, gynaecology and obstetrics, laryngology and otology, medical radiology, ophthalmology, public health, tubercular and chest diseases, venereology.

Note
Founded in 1918, this is a teaching and affiliating university with ten constituent and 77 affiliated colleges as well as university colleges of arts, commerce and business management, education, engineering, law, science, and technology. ETR-77

IND 107 **PANJAB UNIVERSITY**

Associated institutions
Christian Medical College, Ludhiana
College of Nursing, Chandigarh (see IND 100)
Dayanand Medical College, Ludhiana
Government College of Home Science, Chandigarh
Postgraduate Institute of Medical Education and Research, Chandigarh (see IND 110)

Enquiries
Registrar, Panjab University, Chandigarh, Union Territory, 160014
Tel: 23324; telegram: University Chandigarh

General details
1)Jul-Apr in 3 terms 2) 62,000 mostly in affiliated colleges
3) 2,300 4)English 5)Many students, including those from Fiji, Malaysia and Mauritius are accepted.

Relevant faculties
Medical sciences - Science and maths

Courses
*** FIRST DEGREES
2-year course in nursing; 3 years in home science, pharmacy; 4 years in biochemistry, biophysics, microbiology; 50 months plus 12 months housemanship in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in biochemistry, biophysics, home science, microbiology, pharmacology, pharmacy; 3 years in various medical and surgical specializations.

**** DOCTORAL STUDIES
PhD in all faculties takes 3 years; DSc 6 years after master's.

**** DIPLOMA
1-year postgraduate Diploma courses in anaesthetics, child health, clinical pathology, dermatology and venereology and leprosy; gynaecology and obstetrics, laryngology and otology, medical radio-diagnosis, medical radiology, medical radiotherapy, ophthalmic medicine and surgery, tubercular and chest diseases.

Note — Founded in 1947, following the partition of the Punjab, this is a teaching and affiliating university with 83 affiliated colleges. ETR-77

IND 108 PATNA UNIVERSITY

Associated institutions — **In 1971, the administration of the medical faculty, including Prince of Wales Medical College, Patna, was taken over by the State Government, although examinations continue to be conducted by the university.**

Enquiries — Registrar, Patna University, Patna, Bihar, 800005. Tel: 5044; telegram: Patversity Bihar

General details — 1)Jul-May in 3 terms 2)c.14,000 3) 2,575 4)English 5)Students from other countries are accepted.

Relevant faculty — Engineering - Medicine

Courses

*** FIRST DEGREES
4-year courses in dentistry; 4½ years in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in medicine and surgery

**** DOCTORAL STUDIES
PhD requires 2 years; DSc 3 years after PhD or 5 years after master's.

**** DIPLOMA
1-year postgraduate Diploma courses in anaesthesiology, child health, clinical pathology, gynaecology and obstetrics, laryngology and otology, medical radiology, ophthalmology, orthopaedic surgery, public health, public health engineering, tuberculous diseases. ETR-77

IND 109 POONA COLLEGE OF PHARMACY

Enquiries — Administrator, Poona College of Pharmacy, 122 Bhawani Peth, Poona 2, Maharashtra. Tel: 27538

Managing agency — Directorate of Technical Education

General details — 1)Sep-Oct, Nov-Jun 2) 130 3)None 4)English 5)No students from other countries have so far been accepted, but this is not ruled out.

Courses

** PHARMACY
2-year Diploma course in pharmacy
Secondary School Certificate or its equivalent with English, science and mathematics.

IND 110 **POSTGRADUATE INSTITUTE OF MEDICAL EDUCATION AND RESEARCH**

Enquiries Director, Postgraduate Institute of Medical Education and Research, Sector 12, Chandigarh, Tel: 23622; telegram: Postgradmed Chandigarh

General details 1)From Sep (undergrads) and Jan/Jul (postgrads) 2) 440 3) 387m & 105f 4)English 5)Students from other countries have been accepted; no fixed number

Relevant departments Anaesthesia - Anatomy - Biochemistry - Biophysics - Biostatistics - Blood transfusion - Cardiology - Cardio-thoracic surgery - Community medicine - Dentistry - Dermatology - Ear, nose and throat - Endocrinology - Experimental medicine - Gastroenterology - General surgery - Genito-urinary surgery - Haematology - Hepatic diseases - Immuno-pathology - Internal medicine - Medicine - Microbiology - Nephrology - Neurology - Neuro-surgery - Nursing - Obstetrics & gynaecology - Ophthalmology - Orthopaedic surgery - Paediatrics - Paediatric surgery - Pathology - Parasitology - Pharmacology - Plastic surgery - Psychiatry - Radiodiagnosis - Radiotherapy - Virology.

Courses

** OPERATING THEATRE TECHNIQUES
1-year course for operating theatre assistant (10 seats only).
Matriculation or its equivalent, with physics and chemistry

*** FIRST DEGREES
2-year courses for BSc Medical Technology with options in laboratory technology, in X-ray technology, or in audiology and speech therapy.
Pass in pre-medical or pre-engineering course, or Higher Secondary/ Matriculation with further certificate/diploma in related field, plus 3-5 years relevant work experience.

**** MASTER'S LEVEL
2-years for MD in anaesthesiology, biochemistry, general medicine, microbiology, obstetrics & gynaecology, paediatrics, psychiatry, pathology, pharmacology, radiodiagnosis, radiotherapy; 2 years for MS in general surgery, orthopaedic surgery, ophthalmology, otorhinolaryngology; 2-4 years (depending on subject of first degree) for MSc (Biochemistry); 1 year for MDs (pedontia and preventive dentistry)
For MD/MS, MBBS of recognized university, with 1 year's service in a hospital recognized by the Institute for this purpose. For MSc course, MBBS or BSc in selected discipline, or BVSc, or BPharm, or other qualification deemed suitable by the Institute. For MDs course, BDS of recognized university.

**** DOCTORAL STUDIES
3-6 years for PhD by thesis showing evidence of candidate's research contribution, in any department, division or speciality at the Institute; 2 years for DM with following specializations: cardiology, endocrinology, gastro-enterology, nephrology, neurology, clinical pharmacology; 2 years for MCh with specializations: cardio-vascular and thoracic surgery, neuro-surgery, plastic surgery, paediatric surgery, urology.
For PhD, recognized and relevant master's degree; for DM, master's degree in medicine or paediatrics; for MCh, master's degree in surgery.

**** VARIOUS
1-year postgraduate diplomas in health and hospital administration, and in immunohaematology and blood transfusion.
Appropriate first or second degree, with some work experience in the subject field.

IND 111 **PUBLIC HEALTH INSTITUTE, BANGALORE**

Enquiries — Deputy Director (Laboratories), Public Health Institute, Bangalore-560001, (Karnataka), Tel: 70248; telegram: Vaccine

Managing agency — Government of Karnataka, Dept. of Health & Family Welfare

General details — 1)Jan-Dec 2) 170 3)None 4)English 5)No students from other countries have so far been accepted, but this is not ruled out.

Courses

*** FOOD INSPECTION
45 working days for proficiency certificate as Food Inspector.
SSLC and a pass in health inspectors training course, with experience as health inspector; in-service.

*** LABORATORY TECHNOLOGY
1-year for certificate of proficiency as Senior Laboratory Technology.
SSLC and a pass in junior laboratory technician training course; in-service.

Note — The Public Health Institute, Bangalore is the State Public Health Laboratory of Karnataka, established over 60 years ago. It is engaged in the following activities: vaccine manufacture (cholera and typhoid); bacteriological diagnosis; bacteriological and chemical analysis of water and sewage; analysis of foods under prevention of food adulteration act; chemical analysis of drugs and alcoholic preparations; training programmes; referral services to regional laboratories.

IND 112 **PUBLIC HEALTH INSTITUTE, PATNA**

Enquiries — Director, Public Health Institute, Patna-4, Bihar.

Managing agency — State Government of Bihar

General details — 1)Varies 2) 135 3)None 4)Hindi & English 5)No students from other countries have so far been accepted; acceptance would be subject to approval of Bihar Government.

Relevant departments — Bacteriology - Health Education - Nutrition - P H chemistry - M S Engineering - Cholera control.

Courses

** HEALTH CARE
4-month certificate course in basic health care, for health workers in anti-malaria service.
Matriculation

** SANITARY INSPECTION
9-months course for sanitary inspectors, leading to certificate.
Matriculation with science, age 18-25 years.

*** MEDICAL LABORATORY TECHNOLOGY
1-year diploma course for medical laboratory technician, to provide hospital staff.
Intermediate science, age 17-23 years.

**** PUBLIC HEALTH
6-week courses of training for medical graduates, as part of regular internship training.
MBBS.

Note — The Institute also provides service training for lady health visitors.

IND 113 **PUNJABI UNIVERSITY**

Associated institutions are: Guru Gobind Singh Medical College, Dental College, Patiala, and Government Medical College, Patiala.

Enquiries — Registrar, Punjabi University, Patiala, Punjab, 147002. Tel: 312; telegram: University Patiala

General details — 1)Jul-May 2)c.31,800, including 25,782 in affiliated colleges 3) 386 4)English, Punjabi, Hindi or Urdu may also be used for some first degree courses 5) 72 students are accepted annually from other countries (all courses).

Relevant faculty — Medicine

Courses

*** FIRST DEGREES
4-year course in dentistry; 4½ years in medicine and surgery

**** MASTER'S LEVEL
2-year courses in pharmacy, as well as in most medical and surgical specializations.

**** DOCTORAL STUDIES
PhD requires 2 to 3 years; DSc by published work 6 years after master's or PhD.

**** VARIOUS
1-year postgraduate diploma courses in anaesthetics, child health, gynaecology and obstetrics, ophthalmic medicine and surgery.

Note — Founded in 1962, this is a teaching and affiliating university with 47 affiliated colleges and its own teaching departments.

IND 114 **RADIATION MEDICINE CENTRE, BHABHA ATOMIC RESEARCH CENTRE**

This is a recognized postgraduate institute of the University of Bombay.

Enquiries — Head, Radiation Medicine Centre, Bhabha Atomic Research Centre, c/o Tata Memorial Hospital Annexe, Jerbai Wadia Road, Parel, Bombay 400012. Tel: 440161/445325/445333/441970; telegram: Barc-Bombay-Chembur.

Managing agency — Department of Atomic Energy, Government of India

General details — 1)Aug-May in 2 terms 2) 5-Lo 3)Yes 4)English 5)Students from overseas countries could be considered for acceptance.

Relevant departments — Radiation medicine centre

Courses

**** RADIATION MEDICINE
1-year postgraduate diploma course in radiation medicine (DRM).
Graduates in medicine with 1 year experience in hospital.

**** MEDICAL RADIOISOTOPE TECHNIQUES
1-year postgraduate diploma course in medical radioisotope techniques (DMRIT), to train technologists in nuclear medicine.
Graduates or postgraduates of science with physics as one of the subjects; biophysics graduates already working in hospitals, with sponsorship, are given preference.

Note — The Centre started functioning in 1963, and is an integral unit of the Medical Group of Bhabha Atomic Research Centre. It has a wide range of nuclear medicine instrumentation such as gamma cameras, rectilinear scanners, multi prove scintillation detectors with chart recorders, gas flow counters, automatic liquid scintillation counters, etc. There are also absorption spectrophotometers, flame phoneters, sterile room,

animal house. A 20-bed ward admits patients for specialized investigations and is suitable for isolating patients of thyroid cancer treated with large doses of radioiodine.

The Centre is recognized as a Regional Reference Centre of World Health Organization for South East Asia in Nuclear Medicine. From time to time it organizes a selection of other programmes.

IND 115 **RAVISHANKAR UNIVERSITY**

Associated institution: **Pt. J.N.M. Medical College, Raipur**

Enquiries: Registrar, Ravishankar University, Raipur, Madhya Pradesh, 492002. Tel: Raipur 23970; telegram: University Raipur

General details: 1)Jul-Apr in 3 terms 2)c.22,000 including c.20,000 in affiliated colleges 3) 124 4)English & Hindi; English only for medicine and postgraduate science 5)Students from other countries are accepted.

Relevant faculties: Life science - medicine

Courses:

*** FIRST DEGREES
3-year courses in home science; 5 years in medicine and surgery.

**** MASTER'S LEVEL
3-year courses in medicine and surgery

**** DOCTORAL STUDIES
PhD in all faculties except medicine, 4 years after master's degrees.

**** DIPLOMA
1-year postgraduate Diploma course in clinical pathology

Note: Founded in 1963, this is a teaching and affiliating university with 13 constituent and 44 affiliated colleges. ETR-77

IND 116 **RURAL HEALTH TRAINING CENTRE, DIBRUGARH**

Associated with Assam Medical College

Enquiries: Health Officer, i/c Rural Health Training Centre, P.O. Chabua, Dist. Dibrugarh, Assam 786184. Tel: CHB 41; telegram: Health Centre, Chabua.

Managing agency: Directorate of Health Services, Assam

General details: 1)Varies 2) 370 3) 100m & 30f 4)English 5)Students from other countries are considered; a study tour by medical & paramedical personnel from Burma was organized by WHO in 1960.

Courses:

** NURSE/MIDWIFE
6-month certificate course for auxiliary nurse midwife (ANM) supervisor.
Matriculation standard, serving as ANM, in-service.

** HEALTH VISITOR
2½-year certificate course for lady health visitor.
Matriculation/Higher School Leaving Certificate.

** SANITARY INSPECTOR
1-year certificate course for sanitary inspector.
Matriculation/Higher School Leaving Certificate

*** PUBLIC HEALTH
Public health orientation courses for undergraduate senior (4th year) medical students from Assam Medical College, Dibrugarh.
Undergraduate at the Assam Medical College

**** PUBLIC HEALTH
3-month courses of training in rural health care delivery services as public health field practice for rotating internee doctors.
MBBS

Note — The Centre was established in 1958 in collaboration with WHO, UNICEF and the Government of India. A multi-purpose workers training scheme for medical and paramedical personnel is proposed, also a diploma course in community medicine and health for medical graduates, and it is hoped these may be offered shortly.

IND 117 RURAL HEALTH TRAINING CENTRE, NAJAFGARH

Enquiries — Officer in Charge, Rural Health Training Centre, Najafgarh, New Delhi 110043. Tel: 86-2311

Managing agency — Ministry of Health & Family Welfare, New Delhi

General details — 1)Varies 2) 644 3)Some 4)English & Hindi 5) 10-20 students are accepted annually from other countries.

Relevant departments — Medical - Social science including Health education - Sanitary engineering - Nursing

Courses

*** RURAL HEALTH
3-month medical internship leading to rural experience certificate.
Medical intern, pre-service.

*** RURAL HEALTH
2-10 week courses for students under training in regular nursing courses and public health nursing course, including BSc.
Trainee in nursing courses, pre-service.

*** APPLIED NUTRITION
1-2 week courses of training for medical and paramedical staff, for orientation to applied nutrition programme.
Qualified MBBS, LHV/ANM, social scientists; primary, middle and higher secondary school teachers; formal/informal community leaders.

*** PUBLIC HEALTH
30 working days of orientation to multi-purpose workers scheme, training for key trainers.
Members of a faculty in a training centre

*** RURAL HEALTH
Courses of training for nursing tutor and ward sisters, to provide rural experience.
In-service, for those under training in their regular post certificate courses.

**** PUBLIC HEALTH
Orientation to multi-purpose workers scheme for district level medical officers from states.
In-service for district level medical officers.

Note — The Institution is registered with UNESCO for Asia and the Pacific, and is a recognized institution for WHO programmes and those of other international agencies.

Special courses can be specially designed to meet training requirements of other developing countries if sufficient advance notice is given.

IND 118 **SAMBALPUR UNIVERSITY**

Associated institution: **V.S.S. Medical College, Burla**

Enquiries: Registrar, Sambalpur University, Jyoti Vihar, P.O. Burla, Sambalpur, Orissa, 768017. Tel: Burla 137; telegram: University Burla Sambalpur

General details: 1)Jun-May in 2 semesters 2)c.15,000 3)Yes 5)About 20 students a year are accepted annually.

Relevant faculties: Medicine - Science

Courses:

*** FIRST DEGREES
5½-year courses in medicine and surgery.

**** MASTER'S LEVEL
2-year course in biological sciences; 3 years in anaesthetics, anatomy, biochemistry, ear-nose-and-throat, forensic medicine and toxicology, general surgery, medicine, obstetrics and gynaecology, ophthalmology, pathology, pharmacology, physiology, social and preventive medicine.

**** DOCTORAL STUDIES
PhD in all faculties 2 years after master's; DSc 3 years after PhD, or 5 years after master's.

**** DIPLOMA
2-year postgraduate Diploma courses in anaesthetics, child health, medical radiodiagnosis, orthopaedics, tubercular and chest diseases, venereology.

Note: Founded in 1967, this is a teaching and affiliating university with two constituent and 27 affiliated colleges. ETR-77

IND 119 **ST JOHN'S MEDICAL COLLEGE**

Affiliated to Bangalore University

Enquiries: Dean, St John's Medical College, Sarjapur Road, Bangalore - 5600034. Tel: 42061; telegram: 'Sainjohns' Bangalore

Managing agency: CBCI Society for Medical Education

General details: 1)Not known 2) 60 per cent 3) 275m & 75f 4)English 5)A limited, but not fixed, number of overseas students may be admitted annually (all countries considered).

Relevant departments: Anatomy - Physiology - Biochemistry & biophysics - Pathology - Microbiology - Forensic Medicine - Medicine - Surgery - Obstetrics & gynaecology - Community medicine.

Courses:

** LABORATORY TECHNOLOGY
1-year certificate course for laboratory technicians.
SSLC pass, or equivalent.

*** FIRST DEGREE
4½ years, plus 1-year internship, for MBBS.
Pre-university (Karnataka, 2 years) or equivalent.

Note: The College is affiliated with the National Institute of Mental Health and Neuro Sciences and with St Martha's Hospital, Bangalore University. It has good relations with the Indian Institute of Management, Bangalore. Some support is received from USAID.

IND 120 **SAURASHTRA UNIVERSITY**

Associated institution: **M.P. Shah Medical College, Jamnagar**

Enquiries: Registrar, Saurashtra University, University Campus, Kalavad Road, Rajkot, Gujarat, 360005. Tel: 27601-4; telegram: University Rajkot

General details: 1)Jun-Mar/Apr in 2 terms 2)c.41,500 mostly in affiliated colleges 3) 96m 4)Gujarati; English or Hindi may be used

Relevant faculties: Medicine - Science

Courses:

*** FIRST DEGREES
3-year course in microbiology; 5½ years in medicine and surgery.

**** MASTER'S LEVEL
2-year course in bio-sciences; 3½ years in anaesthetics, anatomy, biochemistry, general surgery, medical bacteriology, medicine and therapeutics, obstetrics, gynaecology and diseases of the new-born, ophthalmology, orthopaedics, otorhinolaryngology, paediatrics, pathology, pharmacology, physiology, or preventive and social medicine.

**** DOCTORAL STUDIES
PhD requires 2 years

**** DIPLOMA
2-year postgraduate Diploma courses in anaesthetics, clinical pathology, gynaecology and obstetrics, medical radiology and electrology, ophthalmic medicine and surgery, paediatrics.

Note: Founded in 1967, this is a teaching and affiliating university with 57 affiliated colleges and three recognized institutions, in addition to its own postgraduate departments and centres. ETR-77

IND 121 **SHIVAJO UNIVERSITY**

Associated institutions: **Dr Vaishampayan Memorial Medical College, Solapur**
Miraj Medical College

Enquiries: Registrar, Shivaji University, Vidyanagar, Kolhapur, Maharashtra 416004. Tel: Kolhapur 4271; telegram: Unishivaji, Kolhapur.
Dean, Dr V M Medical College, Solapur, Maharashtra. Tel: 2278.
Principal, Miraj Medical College, Miraj, Sangli District, Maharashtra 416410. Tel: 695.

General details: 1)Jun & Nov 2) 73,642 (total in univ. & affil. colls.) 3)Yes 4)English 5)Two students from overseas countries are accepted annually.

Relevant faculties: Medicine (including Ayurvedic medicine)

Courses:

*** FIRST DEGREE
4 years for pharmacy, and for nursing; 5½ years, including 1-year internship, for medicine and surgery.
Pre-degree (1-year course after Secondary School Certificate).

**** DIPLOMAS
2-year postgraduate diploma courses in anatomy, anaesthetics, child health, clinical pathology, obstetrics & gynaecology, ophthalmology, otorhinolaryngology, public health, tubucular & chest diseases.
Appropriate first degree

**** MASTER'S LEVEL
3 years for MD with specializations in general medicine, obstetrics & gynaecology, paediatrics, pathology and bacteriology, pharmacology, physiology, preventive & social medicine; and for MS with specializations in anatomy, ENT, general surgery, ophthalmology, orthopaedics.
Appropriate first degree

**** DOCTORAL STUDIES
PhD requires minimum of 2 years after higher degree DSc requires 2 years after PhD, or 3 years after master's, or 6 years after bachelor's.

IND 122 SHREEMATI NATHIBAI DAMADAR THACKERSEY WOMEN'S UNIVERSITY

Enquiries: Registrar, S N D T Women's Unviersity, 1 Thackersey Road, Bombay 400020. Tel: 291879; telegram: Uniwomen Bombay

General details: 1)Jun-Nov, Dec-May 2) 386 3)Some hostel accommodation for women 4)English 5)A few students have been accepted from countries in Africa, Middle East, Malaysia.

Courses:

** MEDICAL TECHNOLOGY
3-year course, leading to diploma in medical technology. The course also covers pharmacy, clinical pathology and microbiology.
Secondary School Certificate or equivalent with maths and science.

** FOOD TECHNOLOGY
2½-year course, leading to diploma in food technology, to train middle level technician in food industries.
Secondary School Certificate or equivalent

*** NURSING

3-year degree course in general nursing, leading to BSc Nursing.
Higher Secondary School Certificate, with biology and chemistry.

**** NURSING
2-year course leading to MSc Nursing, to train nurses to work at management level.
BSc Nursing, with 2 years experience in a hospital or community health unit.

**** FOODS AND NUTRITION
Minimum 2 years for MSc Home Science with specialization in foods and nutrition. Also minimum 2 years for PhD Home Science with specialization in foods and nutrition.
BSc Home Science or equivalent for MSc course; MSc Home Science for PhD course.

Note: Some of these courses take place in the associated institutions of the university: Leelabai Thackersey College of Nursing, Premlila Vithaldas Polytechnic, Sir Vithaldas Thackersey College of Home Science. In the past the University has collaborated with the Leelabai Thackersey College of Nursing to organize short-term post-basic professional courses such as Intensive care in cardio-pulmonary conditions (1974), Neurological & neurosurgical nursing (1975), Ward administration (1976).

IND 123 SITAPUR EYE HOSPITAL

Enquiries: Chief Medical Officer, Sitapur Eye Hospital, Sitapur - 261001. Tel: 270; telegram: Cmoeye

Managing agency: Sitapur Eye Hospital Trust (Charitable Foundation)

General details 1)Jul-May 2) 31 3)Yes 4)English 5) 4 students from other countries attend the optometry course annually, but no fixed number for students from abroad.

Relevant departments School of Orthoptics - School of Optometry

Courses *** ORTHOPTICS
2-year diploma course in orthoptics, to train paramedical personnel.
Intermediate or its equivalent with science (biology group).

*** OPTOMETRY
2-year diploma course in optometry, to train paramedical personnel.
As for Orthoptics course, above.

Note See also IND 75

IND 124 **SMT. N. H. LAKHAMICHAND MUNICIPAL MEDICAL COLLEGE**

Affiliated college of Gujarat University

Enquiries Dean, Smt. N.H.L. Municipal Medical College, Ahmedabad-380006.
Tel: 78080, 78375

Managing agency Ahmedabad municipal corporation

General details 1)Not known 2) 598 3)Some m & f accom. available. 4)English 5)Only local students have been admitted to the college

Courses *** FIRST DEGREE
4½ years for first degree in medicine, MBBS.
Higher secondary certificate or equivalent, age 17 years.

**** MASTER'S LEVEL
3½ years for MSc (Medical); 3 years for MD with the following specializations: anatomy, physiology, pharmacology, preventive & social medicine.
MBBS, no age limit.

IND 125 **SOUTH GUJARAT UNIVERSITY**

Associated institution **Government Medical College, Surat**

Enquiries Registrar, South Gujarat University, Udhna-Magdalla Road, Post Box No. 49, Surat, Gujarat, 395007. Tel: 28321-2; telegram: Soguni

General details 1)Jun-Mar/Apr in 2 terms 2)c.31,700 including 30,800 in affiliated colleges 3)Yes 4)Gujarati or English 5)Students from other countries are accepted some from Africa.

Relevant faculties Medicine - Science

Courses *** FIRST DEGREES
3-year courses in home science, microbiology; 5½ years in medicine and surgery.

**** MASTER'S LEVEL
2-year course in microbiology; 3 years in ear-nose-and-throat, general medicine and therapeutics, general surgery, obstetrics, gynaecology and diseases of the new-born, ophthalmology, orthopaedics, paediatrics, pathology, pharmacology, preventive and social medicine.

**** DOCTORAL STUDIES
PhD requires 2 years.

Note — Founded in 1967, this is a teaching and affiliating university with 34 affiliated colleges as well as its own departments. ETR-77

IND 126 S V MEDICAL COLLEGE, TIRUPATI

Affiliated to the Sri Venkateswara University

Enquiries — Principal, S V Medical College, Tirupati, Chittoor District, Andhra Pradesh. Tel: 2378; telegram: Medcol

Managing agency — State Government

General details — 1)Jun-Apr 2) 660 3)Some 4)English 5)Students from other countries have not been accepted so far.

Relevant departments — Physics - Chemistry - Biology - Anatomy - Physiology - Biochemistry - Pathology - Microbiology - Pharmacology - Forensic medicine - Social and preventive medicine - Medicine - Cardiology - Surgery - Obstetrics & gynaecology - ENT - Ophthalmology - Paediatrics - Orthopaedics - Anaesthesia - Radiology - Tuberculosis - Dermatology and VD - Psychiatry - Dental surgery.

Courses —

*** FIRST DEGREES
5½ years for MBBS
Two year Intermediate course

**** MASTER'S LEVEL
3 years for MD in pathology, microbiology, biochemistry, anaesthesia and medicine (GM), orthopaedics, ophthalmology; and for MS in general surgery.
MBBS

**** VARIOUS
2-year postgraduate diplomas in child health, tubercular and chest diseases, obstetrics & gynaecology, anaesthesia, and pathology.
MBBS

IND 127 TATA INSTITUTE OF SOCIAL SCIENCES

Enquiries — Registrar, Tata Institute of Social Sciences, Sion Trombay Road, Deonar, Bombay 400088. Tel: 532701; telegram: Fernstalk

General details — 1)Jul-Mar in 2 semesters 2) 240 3) 90m & 30f 4)English 5)A limited but not fixed, number of overseas students may be admitted annually (all countries considered).

Relevant departments — Family & child welfare - Medical & psychiatric social work - Research methodology

Courses —

**** MASTER'S LEVEL
2-year courses in family and child welfare, and in medical and psychiatric social work, leading to MA in Social Work. 1-year course in social work and social sciences, leading to MPhil.
Appropriate first degree

**** DOCTORAL STUDIES
PhD requires 3 to 5 years after master's.
Appropriate higher degree

**** VARIOUS
1-semester postgraduate certificate course in research methodology
Appropriate first degree

Note — In 1964, the Government of India declared that the Institute should be deemed to be a University. The Institute is actively engaged in research work as well as postgraduate training, and is involved in research studies sponsored and supported by several agencies including the Government of India, the Indian Council of Social Sciences Research, the University Grants Commission, Municipal Corporation of Greater Bombay and international organizations.

IND 128 — **TIRUNEEVELI MEDICAL COLLEGE**

Affiliated to Madurai Kamaraj University

Enquiries — Dean, Tirunelveli Medical College, Tirunelveli 627 011. Tel: 2310, 2410.

Managing agency — Government of Tamil Nadu

General details — 1)Varies 2)c.500 3) 186m & 133f 4)English 5)Students have been accepted from Sir Lanka, Burma and Malaysia

Courses — *** MEDICINE
6½ years for bachelor of medicine and surgery (MBBS)
Pre-university certificate, age from 16½ years.

IND 129 — **TRAINING CENTRE FOR MEDICAL RECORDS, SAFDARJANG HOSPITAL**

Enquiries — Director, Central Bureau of Health Intelligence, Directorate General of Health Services, Nirman Phavan, New Delhi. Tel: 375650; telegram: Hospitalsindia

Managing agency — Ministry of Health and Family Welfare

General details — 1)1st Mar and 1st Sep 2) 20 3)None 4)English 5)About 5 students on technician course, and 1 on officer course, are from overseas.

Courses — *** MEDICAL RECORDS
6-month certificate course for medical record technicians
Pre-university or Higher Secondary course, with typing speed of not less than 30 wpm, and preferably some experience in medical records.

**** MEDICAL RECORDS
1-year diploma course for medical record officers
BA, with typing speed of not less than 30 wpm.

Note — The Training Centre was established in 1973, with assistance from WHO by way of books and equipment. Candidates under T.C.S. Colombo Plan and SCAPP have utilized the facilities. Hostel accommodation is likely to be provided in the near future.

IND 130 — **UNIVERSITY OF ALLAHABAD**

Associated institution — **The Moti Lal Nehru Medical College, Allahabad**

Enquiries — Registrar, University of Allahabad, Allahabad, Uttar Pradesh, 211002. Tel: 50668; telegram: University Allahabad

General details — 1)Jul-May in 3 terms 2) 11,583 3) 10,274

Relevant faculties: Medicine - Science

Courses:

*** FIRST DEGREES
2-year courses in home science; 4½ years in medicine and surgery.

**** MASTER'S LEVEL
1-year courses in medicine and surgery require 1 year's experience as house-surgeon and are taken three years after graduation.

Note: Founded in 1887, the university is a teaching and residential institution with its own teaching departments plus three residential colleges which provide tutorial and supplementary instruction, five associated colleges and a constituent college. ETR-77

IND 131 UNIVERSITY OF BIHAR

Associated institution: **Sri Krishna Sinha Medical College, Muzaffarpur**

Enquiries: Registrar, University of Bihar, Muzaffarpur, Bihar. Tel: 537; telegram Bihvarsity

General details: 1)Jun-May in 3 terms 2)c.53,000 3)Yes 4)Hindi for some first degree courses, English otherwise.

Relevant faculties: Medicine

Relevant departments: No university departments; all teaching done through constituent or affiliated colleges.

Courses:

*** FIRST DEGREES
5-year courses for medicine and surgery

**** MASTER'S LEVEL
3-years in medicine and surgery

**** DOCTORAL STUDIES
PhD requires 2 years after master's. DSc 3 years after PhD or 5 years after master's.

**** DIPLOMA
1-year courses for postgraduate diplomas in clinical pathology, gynaecology and obstetrics, tropical medicine and hygiene.

Note: This is an affiliating and teaching university, established in 1952 and consisting of five constituent and some 55 affiliated colleges, through which teaching is carried out. Postgraduate teaching and research in the affiliated colleges is conducted directly by the university.

IND 132 UNIVERSITY OF BOMBAY

Associated institutions:
Bhaba Atomic Research Centre (see IND 114)
Bombay College of Pharmacy, Kalina
College of Home Science (see IND 28)
College of Pharmacy, Ulhasnagar
Goa College of Pharmacy, Panaji
Goa Medical College, Panaji
Government Dental College and Hospital, Bombay
Haffkine Institute (see IND 40)
Grant Medical College, Byculla, Bombay
Indian Cancer Research Institute, Parcl, Bombay
Institute of Naval Medicine, Bombay

Institute of Nursing Education
Lokmanya Tilak Municipal Medical College, Sion, Bombay
Nair Hospital Dental College, Bombay
Pathology Department of Bombay Hospital of the Medical Research Society
Seth G S Medical College, Bombay
Topiwala National Medical College, Bombay

Enquiries — Registrar, University of Bombay, University Road, Fort, Bombay, Maharashtra, 400032. Tel: 255726-8; telegram: Bombay University, Bombay 32.

General details — 1) 2 terms Jul-Oct, Nov-Mar (except medicine and dentistry Jul-Nov, Jan-May) 2) c.108,400 (in university proper) 3) 587 (in university proper; constituent colleges also have hostels 4) English 5) 546 including over 200 from African countries.

Relevant faculties — Dentistry - Medicine - Science

Courses

*** FIRST DEGREES
2-year courses in audiology and speech therapy, nursing, occupational therapy, physical therapy; 3 years in pharmacology; 3 years after first year science in home science; 4 years in physiology, comparative anatomy and embryology, microbiology; 4½ years plus 1 year internship in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in dentistry (dental pathology and bacteriology, operational dentistry, oral surgery, orthodontia, periodontia, or prosthetic dentistry), home science (child development and family relations, food nutrition and dietetics), occupational therapy (biomechanics and prosthetics and orthoptics, clinical psychology in relation to occupational therapy, occupational therapy in cardio-thoracic or neurological or orthopaedic or psychiatric conditions or in paediatric neurology, rehabilitation of the hand or of the physically handicapped), pharmacy, physical therapy (applied neuroanatomy and neurophysiology relevant to physical therapy, electrodiagnosis and electromyography, electrotherapy, evaluation procedures in physical therapy, kinesiology and biomechanics of the musculo-skeletal system, physical therapy in cardiology and respiratory diseases or in orthopaedics on in neurological disorders or in paediatric neurology, prosthetics and orthoptics, rehabilitation of hand conditions or of the physically handicapped, therapeutic exercies), food technology; 3 years in medicine (anaesthetics, cardiology, human physiology, medicine and therapeutics, microbiology, neurology, obstetrics and gynaecology and diseases of infancy, paediatrics, pathology, pathology and bacteriology, pharmacology, preventive and social medicine, psychological medicine, radiology, skin diseases, or tuberculous and chest diseases), and in surgery (general surgery, human anatomy, ophthalmology, orthopaedics, or otorhinolaryngology); 5 years in neuro-surgery, paediatric surgery, plastic, or thoracic surgery.

**** DOCTORAL STUDIES
DHy in hygiene requires 1 year after at least 1 year's experience as a medical officer; PhD requires 1 to 2 years after master's or 3 years after bachelor's degree.

**** DIPLOMA
1-year postgraduate Diploma courses in anaesthetics, chemical pharmacology, forensic medicine, medical laboratory technology, medical radio-isotopic techniques, radiation medicine, radiological physics, venereology and dermatology; 2 years for medical radio-diagnosis, medical radio-therapy, psychological medicine, public health.

Note — Founded in 1857, this is a teaching and federal university with 113 constituent colleges (responsible for all undergraduate and much of the postgraduate instruction) and 36 recognized institutions (providing postgraduate teaching and research facilities) as well as its own, postgraduate, teaching departments. ETR-77

IND 133 UNIVERSITY OF CALCUTTA

Associated institutions
All India Institute of Hygiene and Public Health (see IND 3)
College of Nursing, Calcutta (see IND 105)
Dr. R Ahmed Dental College and Hospital, Calcutta
Institute of Child Health, Calcutta
Institute of Postgraduate Medical Education and Research (see IND 48)
Medical College, Calcutta
National Medical College, Calcutta
Nilratan Sarkar Medical College, Calcutta
RG Kar Medical Medical College, Calcutta
Sammilani Medical College, Bankura
School of Tropical Medicine, Calcutta
University College of Medicine
Viharilal College for Home Science, Calcutta

Enquiries
Registrar, University of Calcutta, Senate House, College Street, Calcutta, West Bengal, 700012. Tel: 34-3014/9; telegram: University Calcutta

General details
1)Jun-May 2)c.200,000 at university proper 3) 6,962 4) 143

Relevant faculties
Dental Science - Engineering - Home Science - Medicine

Courses
*** FIRST DEGREES
3-year pass and honours courses in household science; 5 years in dental surgery; 6 years in medicine and surgery.

**** MASTER'S LEVEL
1-year course in public health engineering; 2 years in medicine, public health; 3 years in most medical specializations.

**** DOCTORAL STUDIES
PhD requires 2 years in faculties of medicine or science. DSc 3 years after master's degree.

**** DIPLOMA
9-month postgraduate Diploma course in nutrition; 1 year in anaesthetics, basic medical sciences, cardiology, dermatology, dietetics, health education, health statistics, psychological medicine, tropical medicine and hygiene, venereology; 1½ years in child health, ophthalmic medicine and surgery; 2 years in gynaecology and obstetrics, industrial health, laryngology and otology, public health, radio diagnosis, radiotherapy; 2½ years in maternity and child welfare, tuberculous diseases.

Note
Founded in 1857, the university is a teaching and affiliating institution comprising eight constituent and 173 affiliated colleges as well as university colleges of arts, commerce, law, medicine, science and technology. Attached to the university are centres of advanced study and research in radiophysics and electronics, also the Saha institute of nuclear physics. ETR-77

IND 134 UNIVERSITY OF DELHI

Associated institutions
College of Pharmacy, New Delhi
Hamdard College of Pharmacy, New Delhi
Institute of Home Economics, New Delhi
Lady Hardinge Medical College, New Delhi
Maulana Azad Medical College, New Delhi
Rajkumari Amrit Kaur College of Nursing (see IND 101)
University College of Medical Sciences, New Delhi
Vallabhabhai Patel Chest Institute, Delhi

Enquiries
Registrar, University of Delhi, Delhi, 110007. Tel: 221421; telegram: University Delhi

General details 1)Jul-Mar in 3 terms except for some master's level courses which have 2 semesters 2)c.65,000 in university proper 3) 720 4)English, with Hindi optional for certain courses 5)Students from other countries are accepted.

Relevant faculties Medical science - Science

Courses *** FIRST DEGREES
3-year courses for pass, honours and general degrees in home science, pharmacy; 4 years in nursing; 5½ years in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in home science (foods and nutrition or rural community extension), medical biochemistry, medical microbiology, nursing, and many medical and surgical specializations.

**** DOCTORAL STUDIES
PhD requires 2 years.

**** DIPLOMA
1-year postgraduate diploma courses in anaesthetics, child health, dermatology and venereology, dietetics and public health nutrition, health education, medical radiodiagnosis, medical radiotherapy, microbiology, obstetrics and gynaecology, ophthalmology, otolaryngology, radiation medicine, tuberculosis and chest diseases; also 1-year postgraduate certificate course in forensic science.

Note Founded in 1922, the university is a teaching and affiliating institution with 34 constituent colleges, 14 affiliated colleges (which provide courses up to bachelor's degree level only), 7 university maintained colleges and institutions, 3 government maintained colleges and institutions, and centres of advanced study and research. ETR-77

IND 135 UNIVERSITY OF INDORE

Associated institutions
College of Dentistry, Indore
College of Nursing (see IND 86)
Holkar Science College, Indore
Indore Christian College
MGM Medical College, Indore

Enquiries Registrar, University House, Indore, Madhya Pradesh, 452001
Tel: 5730; telegram: University Indore

General details 1)Jul-Apr in 3 terms 2)c.400 in university proper, c.18,000 in affiliated colleges 3) 75 at university proper 4)English and Hindi (medicine and postgraduate science, English only) 5)79, mainly from Malaysia.

Relevant faculties Home science - Medicine - Science

Courses *** FIRST DEGREES
3-year course in home science; 4 years in dentistry, nursing, pharmacy; 4½ years in medicine and surgery.

**** MASTER'S LEVEL
2-year course in general surgery, life sciences, medicine, obstetrics and gynaecology, ophthalmology, otorhinolaryngology, paediatrics, pathology, pharmacology, physiology, preventive and social medicine.

**** DOCTORAL STUDIES
PhD in all faculties except medicine requires 2 years after master's.

**** DIPLOMA
1-year postgraduate diploma courses in anaesthetics, child health,

clinical pathology, ophthalmic medicine and surgery, otorhinolaryngology, tubercular and chest diseases.

Note — Founded in 1964, this is a teaching and federal university with 19 affiliated colleges. ETR-77

IND 136 UNIVERSITY OF JABALPUR

Associated institutions — **Government Medical College**
Mohanial College of Home Science for Women

Enquiries — Registrar, University of Jabalpur, Saraswati Vihar, Jabalpur, Madhya Pradesh, 482001. Tel: 20751, 23569; telegram: University Jabalpur

General details — 1)Jul-May in 3 terms 2)c.21,200 including affiliated colleges 3)Yes 4)Hindi; examinations may be taken in English or Hindi 5)Students from other countries are accepted.

Relevant faculties — Home science - Life science - Medicine

Courses

*** FIRST DEGREES
3-year course in home science; 5 years in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in child development and family relations, food and nutrition, home management; 3-year courses in medical specializations.

**** DOCTORAL STUDIES
PhD in all faculties takes 2 to 3 years, and DSc 3 to 6 years.

**** DIPLOMA
2-year postgraduate Diploma courses in anaesthetics, child health, clinical pathology, laryngology and otology, medical radiology, ophthalmic medicine and surgery.

Note — Founded in 1957, the university is a teaching and affiliating institution with five constituent and 20 affiliated colleges, and three affiliated institutions. ETR-77

IND 137 UNIVERSITY OF KANPUR

Associated institutions — **G.S.V.M. Medical College, Kanpur (see IND 89)**
Maharani Laxmi Bai Medical College, Jhansi
National Homoeopathic Medical College, Lucknow
Nehru Institute of Ophthalmology and Research (see IND 75)
Sitapur Eye Hospital (see IND 123)

Enquiries — Registrar, University of Kanpur, Kalyanpur, Kanpur, Uttar Pradesh, 208018. Tel: 43301; telegram: University Kanpur

General details — 1)Jul-Jun 2)c.42,000 3) 14 4)Hindi and English (for medicine, English only) 5)Students from other countries are accepted.

Relevant faculties — Engineering and technology - Homoeopathy - Medicine

Courses

*** FIRST DEGREES
5-year courses in medicine and surgery

**** MASTER'S LEVEL
2-year course in medicine; 3 years, including 1 year's housemanship, in surgery.

DOCTORAL STUDIES
PhD in all faculties 3 to 5 years, with DSc 2 years after PhD.

**** DIPLOMA
1-year postgraduate diploma courses in anaesthetics, child health, clinical pathology, gynaecology and obstetrics, tuberculous and chest diseases; 2 years in laryngology and otology, medical radiology and electrology, ophthalmic medicine and surgery, orthopaedic surgery.

Note — Founded in 1966, this is an affiliating university with two constituent and 69 affiliated colleges, but no teaching departments of its own.

IND 138 UNIVERSITY OF KASHMIR

Associated institutions — **Government Medical College, Srinagar**

Enquiries — Registrar, University of Kashmir, University Campus, Hazratbal, Srinagar, Jammu and Kashmir, 190006. Tel: 2333; telegram: University Srinagar

General details — 1)Mar-Dec in 2 terms 2)c.18,600 including c.17,700 in affiliated colleges 3)Yes

Relevant faculty — Medicine

Courses — *** FIRST DEGREES
5½-year courses in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in anatomy, general medicine, general surgery, obstetrics and gynaecology, pathology and microbiology, pharmacology.

**** DOCTORAL STUDIES
PhD requires 2 years

Note — Founded in 1969, and deriving from the Kashmir division of the University of Jammu and Kashmir (established 1948) the university is a teaching and affiliating institution with six constituent and 11 affiliated colleges, and a number of recognized institutions in addition to its own teaching departments. ETR-77

IND 139 UNIVERSITY OF KERALA

Associated institutions — **T.D. Memorial College, Alleppey**
Medical College, Kottayam
Government Medical College, Trivandrum

Enquiries — Registrar, University of Kerala, University Building, Trivandrum, Kerala. Tel: 60594; telegram: University Trivandrum

General details — 1)Jun-Mar in 3 terms 2)c.112,000 including c.60,000 pre-degree students and c.46,000 in affiliated colleges 3) 448 in university proper 4)English 5)Students from other countries are accepted, mainly from Malaysia.

Relevant faculty — Medicine

Courses — *** FIRST DEGREES
3-year courses in medical laboratory technology; 4 years in dentistry, nursing and pharmacy; 4½ years in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in dental surgery, general surgery; 3 years in anaesthetics, anatomy, dermatology and venereology, forensic medicine, general medicine, obstetrics and gynaecology, general surgery, ophthalmology, orthopaedics, paediatrics, pathology, pharmacology, physiology, radiology, or social and preventive medicine.

**** DOCTORAL STUDIES
PhD requires 3 years

**** DIPLOMA
2-year postgraduate Diploma courses in anaestnetics, child health, clinical pathology, gynaecology and obstetrics, ophthalmology, orthopaedics, otorhinolaryngology, physical medicine and rehabilitation, psychiatric medicine; 3 years in medical radiology.

Note — Founded in 1937 as the University of Travancore, it is a teaching and affiliating institution with 83 affiliated colleges. ETR-77

IND 140 UNIVERSITY OF LUCKNOW

Associated institution — **King George's Medical College**

Enquiries — Registrar, University of Lucknow (Faculty of Medicine), Lucknow 226007

General details — 1)Jul-Apr in 3 terms 2)c.30600 (total in univ.) 3)Yes 4)English 5)Students from other countries are accepted

Relevant departments — Anatomy - Physiology - Pathology & bacteriology - Pharmacology & therapeutics - Social & preventive medicine - Medicine - Neurology - Psychiatry - Surgery - Cardiology - Plastic surgery - Ophthalmology - Obstetric & gynaecology - Anaesthesiology - Paediatrics - Radiology - Orthopaedic surgery - Tuberculosis - Otorhinolaryngology - Dentistry

Courses

*** FIRST DEGREES
4 year degree course in dentistry (2 years for medical graduates); 4½ years for medicine and surgery.
Cambridge Higher School Certificate or Intermediate exam of recognized university, or equivalent, plus success in pre-dental/pre-medical examination of Lucknow university.

**** MASTER'S LEVEL
2 years for master of dental surgery (MDS); master degrees awarded on examination and thesis in the following disciplines: (for MD) general medicine, paediatrics, social and preventive medicine, radiology, anaesthesiology, physiology, pathology and bacteriology, pharmacology, psychiatry, tuberculosis, forensic medicine; (for MS) general surgery, obstetrics & gynaecology, orthopaedics, otorhinolaryngology, opthalmology, anatomy; (for MCh) plastic surgery, thoracic surgery, neuro-surgery, experimental surgery.
MBBS plus 1 year housemanship, or accepted equivalent.

**** VARIOUS
Various postgraduate diploma courses available in medical radiology and electrology, laryngology and otology, gynaecology and obstetrics, clinical pathology, TB and chest diseases, ophthalmic medicine and surgery, orthopaedic surgery, child health, anaesthesiology, public health.
As for Master's level courses, above.

**** DOCTORAL STUDIES
PhD in basic medical sciences and clinical sciences requires minimum of 2 years after master's.

IND 141 **UNIVERSITY OF MADRAS**

Associated institutions

Christian Medical College, Vellore (see IND 27)
College of Nursing, Vellore (see IND 83)
Coimbatore Medical College, Coimbatore
Jawalarlal Institute of Postgraduate Medical Education and Research, Pondicherry (see IND 51)
Kilpauk Medical College, Madras
Medical College, Chingleput
Medical College, Madras
Postgraduate Institute of Basic Medical Science, Madras
Stanley Medical College, Madras
Thanjavur Medical College, Thanjavur

Enquiries

Registrar, University of Madras. University Centenary Building, Chepauk, Triplicane P.O., Madras, Tamil Nadu 600005. Tel: 86822; telegram: University Madras

General details

1)Jun-Mar in 3 terms 2)c.136,000 3)Some 4)English and Tamil 5)Students from other countries are accepted, mainly from Malaysia, Sri Lanka, Singapore, Mauritius and Fiji.

Courses

*** FIRST DEGREES
3-year course in medical laboratory technology; 4 years in pharmacy and in nursing; 5 years in dental surgery; 5½ years in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in cardiology, dental surgery, genito-urinary surgery, nephrology, neurology, neuro-surgery, nursing, paediatric surgery, pharmaceutical chemistry, pharamceutics, pharmacognosy, physiology, plastic surgery, public health engineering, thoracic surgery; 3-year courses in medicine, science and surgery, with specializations in anaesthesiology, anatomy, biochemistry, bio-physics, dermatology, forensic medicine, general medicine, general surgery, haematology, microbiology, obstetrics and gynaecology, ophthalmology, orthopaedic surgery, otorhinolaryngology, paediatric medicine, pathology, pharmacology, physiology, radiodiagnosis, radio therapy, social and preventive medicine, venereology.

**** DOCTORAL STUDIES
PhD requires 3 years; DSc 2 years after PhD.

**** DIPLOMA
2-year postgraduate diploma courses in anaesthetics, chest disease, child health, clinical pathology, dermatology, gynaecology and obstetrics, medical radiodiagnosis, medical radiotherapy, ophthalmology, orthopaedics, otorhinolaryngology, physical medicine and rehabilitation, psychological medicine, venereology.

Note

Founded in 1857, this is a teaching and federating university with 144 affiliated colleges spread throughout Tamil Nadu State. The postgraduate institute of basic medical sciences is a constituent part of the university. ETR-77

IND 142 **UNIVERSITY OF MYSORE**

Associated institutions

J.J.M. Medical College, Davangere
Kasturba Medical College, Mangalore/Manipal
Medical College, Mysore

Enquiries

Registrar, University of Mysore, Mysore Viswavidyanilaya Karya Soudha, Crawford Hall, P.B. Bo. 14, Mysore, Karnataka, 570005. Tel: 20677; telegram: Unireg Mysore

General details

1)Jun-Mar in 2 terms 2)c.99,000 3) 760 in university proper 4)English and Kannada

Relevant faculties: Medicine - Science

Courses:

*** FIRST DEGREES 3-year course in speech and hearing, home science; 5 years in pharmacy; 5½ years in dentistry, medicine and surgery.

**** MASTER'S LEVEL
2-year courses in anatomy, dentistry, food technology, forensic medicine, home science, medicine, pathology, pharmacology, pharmacy, physiology, speech and hearing (speech pathology and audiology), surgery.

**** DIPLOMA
1-year postgraduate Diploma courses in ear-nose-and-throat, ophthalmic medicine and surgery.

Note: Founded in 1916, this is a teaching and affiliating university with 140 affiliated colleges. ETR-77

IND 143 UNIVERSITY OF NORTH BENGAL

Associated institution: **North Bengal University Medical College**

Enquiries: Registrar, University of North Bengal, P.O. North Bengal University, Raja-Rammohunpur, Dist. Darjeeling, West Bengal, 734430. Tel: Sili 21455, 21035; telegram: North Bengal University.

General details: 1)Aug-May in 1 term 2)c.21,000 including 20,700 in affiliated colleges 3) 500 postgraduate 4)English 5)Students from other countries are accepted.

Relevant faculty: Medicine and pharmacy

Courses:

*** FIRST DEGREES
3-year course in pharmacy; 5 years in medicine and surgery.

**** MASTER'S LEVEL
1-2 year courses for master's degree.

Note: Founded in 1962, this is a teaching and affiliating university with two constituent, four university and 27 affiliated colleges, in addition to its own postgraduate teaching departments. ETR-77

IND 144 UNIVERSITY OF POONA

Associated institutions: **Armed Forces Medical College, Poona (see IND 79)**
B.J. Medical College, Poona

Enquiries: Registrar, University of Poona, Ganeshkhind, Poona, Maharashtra, India 411007. Tel: 56061/5; telegram: Unipuna

General details: 1)Jun-Mar in 2 terms 2)c.78,500 3) 314 at university proper 4)English and regional languages.

Relevant faculties: Medicine - Mental, moral and social sciences - Science

Courses:

** PHARMACY
2-year sub-graduate diploma course in pharmacy, plus 3 months practical training

*** FIRST DEGREES
3-year courses in microbiology; 4 years in nursing; 5½ years in medicine and surgery.

**** MASTER'S LEVEL
1-year courses in human anatomy, human physiology; 2 years in anaesthetics, anatomy, general surgery, medical anatomy, medical biochemistry, medical pathology, medical physiology, microbiology, ophthalmology, orthopaedics, otorhinolaryngology; 3 years in anaesthetics, medicine, midwifery and gynaecology, paediatrics, pathology, pharmacology, physiology, preventive and social medicine, radiology, or tuberculous diseases.

**** DOCTORAL STUDIES
PhD in all faculties takes 2 years, with DSc 2 years after PhD, or 3 years after master's, or 6 years after bachelor's.

**** DIPLOMA
1-year postgraduate diploma courses in chest diseases, child health, clinical pathology, gynaecology and obstetrics, laryngology and otology, medical radiodiagnosis, ophthalmic medicine and surgery, orthopaedics, public health, venereal diseases; 18 months in anaesthetics; 2 years in psychological medicine.

Note — Founded in 1948, this is a teaching and affiliating university, with 21 constituent degree colleges and 77 affiliated colleges. The university departments engage mainly in postgraduate teaching and research, and there are seven constituent recognized institutions. The aim of the university is to create for the Poona area a central organization beyond intermediate state; all postgraduate teaching and research work is conducted under its direct control. ETR-77

IND 145 — UNIVERSITY OF RAJASTHAN

Associated institutions — **College of Nursing, Jaipur (see IND 87)**
Dr S. N. Medical College, Jodhpur
J.L.N. Medical College, Ajmer
Ravindra Nath Tagore Medical College, Udaipur
Sawai Mansingh Medical College, Jaipur
Sandar Patel Medical College, Bikaner

Enquiries — Registrar, University of Rajasthan, Gandhinagar, Jaipur, Rajasthan, 302004. Tel: 63211; telegram: University Jaipur

General details — 1)Jul-May in 3 terms 2)c.75,000 including c.65,500 affiliated college students 3) 800 4)English 5)Students from other countries, mainly Malaysia are accepted.

Relevant faculties — Medicine and pharmaceutics

Courses

*** FIRST DEGREES
4-year course in nursing; 5 years in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in anaesthetics, anatomy, biochemistry, ear-nose-and-throat, gynaecology and obstetrics, medicine and therapeutics, ophthalmology, orthopaedics, paediatrics, pathology and microbiology, pharmacology and experimental therapeutics, physiology, preventive and social medicine, radiology, surgery.

**** DOCTORAL STUDIES
PhD requires 2 to 4 years and DSc a further 2 years.

**** DIPLOMA
1-year postgraduate diploma courses in anaesthesiology, bacteriology, child health, clinical pathology, ear-nost-and-throat, gynaecology and

obstetrics, medical radiodiagnosis, medical radiotherapy, ophthalmic medicine and surgery, orthopaedics, psychological medicine, public health, tuberculosis and chest diseases, venerology and dermatology.

Note — Founded in 1947, this is a teaching and affiliating university, with four university colleges and 137 affiliated colleges in addition to its own teaching departments. ETR-77

IND 146 UNIVERSITY OF RANCHI

Associated institutions — **M.G.M. Medical College, Jamshedpur**
Patliputra Medical College, Dhanbad
Rajendra Medical College, Ranchi

Enquiries — Registrar, University of Ranchi, Ranchi, Bihar, 834001. Tel: Ranchi 23600; telegram: University Ranchi

General details — 1)Jun-May 2)c.42,600 including 27,500 in affiliated colleges 4)Hindi or English; English only in professional and technical courses.

Relevant faculties — Medicine - Science

Courses — *** FIRST DEGREES
4½-year courses in medicine and surgery.

**** MASTER'S LEVEL
2-year courses in anatomy, biochemistry, general medicine, general surgery, obstetrics and gynaecology, ophthalmology, orthopaedics, otorhinolaryngology, paediatrics, pathology, pharmacology, physiology, psychology; 3 years in psychological medicine.

**** DOCTORAL STUDIES
PhD in medicine and 3 years after bachelor's degree. DSc 3 years after PhD, or 6 years after master's.

**** DIPLOMA
2-year postgraduate Diploma courses ih medical and social psychology, psychiatric social work, or psychological medicine.

Note — Founded in 1960, this is a teaching and affiliating university, with four constituent and 37 affiliated colleges, as well as its own postgraduate teaching departments. ETR-77

IND 147 UTKAL UNIVERSITY

Associated institution — **Sriam Chandra Bhanj Medical College, Cuttack**

Enquiries — Registrar, Utkal University, P.O. Vani Vihar, Bhubaneswar, Orissa, 751004. Tel: 52520; telegram: Utkalvihar Bhubaneswar

General details — 1)Jun-May in 2 terms 2)c.49,200 including 45,500 in affiliated colleges 3) 6,524 4)English 5)Students from other countries are accepted.

Relevant faculty — Medicine

Courses — *** FIRST DEGREES
4½-year courses in medicine and surgery

**** MASTER'S LEVEL
3-year courses in anaesthesiology, anatomy, biochemistry, dermatology and venerology, forensic medicine, obstetrics and gynaecology, ophthalmology, orthopaedic surgery, otorhinolaryngology, paediatrics, pathology, pharmacology, physiology, radiodiagnosis, social and preventive medicine, surgery or therapeutic radiology.

**** DOCTORAL STUDIES
PhD requires 2 years after master's.

**** DIPLOMA
2-year postgraduate Diploma courses, including 1 year's housemanship, in anaesthetics, child health, clinical pathology, dermatology (including venereology and leprosy), gynaecology and obstetrics, laryngology and otology, medical radiodiagnosis, medical radiotherapy, ophthalmology, orthopaedics, tubercular and chest diseases.

Note

Founded in 1943, this is a teaching and affiliating university with two university colleges and 44 affiliated colleges in addition to its own teaching departments. ETR-77

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Jamaica

In 1977 the Jamaica Ministry of Health took a major decision to give priority to primary health care services, and during that year an infrastructure was designed for the expansion and upgrading of the services. The result of this work has been incorporated in a manual *Primary Health Care - the Jamaican Prospective* published by the Ministry in 1978 for the guidance and instruction of all those concerned.

Health care services in Jamaica are provided by both public and private sectors, the Government being the main provider. There are 27 hospitals grouped together and administered by nine regional boards. There are 132 health centres and dispensaries, 10 rural maternity centres, 232 other government maternal and child health clinics and 69 public health dental clinics of which 65 are in hospitals or health centres.

Traditionally, the health services have been divided into two distinct entities, the public health or preventive services and the curative services; the aim of the new programme is to bring about an integrated service. The programme is based on the maxims that whatever health services are given should be made available to everybody; that no highly trained person should spend time routinely doing tasks that could be undertaken by a lesser trained person; and that health cannot be imposed upon a community because its members must decide to what extent they wish to improve their health.

To implement the programme a central primary care unit has been established. Four health area administration divisions have been defined, within which each parish is administered by a medical officer of health with responsibility for the delivery of health care throughout the parish. Each parish has been divided into health districts with a population of about 20,000. The smallest type of health centre serves not more than 4,000 people and is responsible for delivering basic maternal and child health, nutrition, family planning and immunization services. There are three other types of health centres within a district providing more sophisticated and specialized services on an ascending scale.

A two-year in-service training plan in being implemented to satisfy the immediate needs of the service. Although the plan allows for flexibility, so that individual and specific parish plans can be met, the main thrust is to develop a team approach to the health care of communities and individuals, and to upgrade the skills of the various categories of health workers.

JAM 1 CARIBBEAN FOOD AND NUTRITION INSTITUTE

The Institute is linked with the University of the West Indies Medical and Agricultural Faculties.

Enquiries: Director, Caribbean Food and Nutrition Institute, Mona, Kingston 7. Tel: 92-78338; telegram: Cajanus, Jamaica.

Managing agency: Pan American Sanitary Bureau (WHO)

General details: 1)Varies 2)Variable 3)None 4)English 5)This is a regional institution (see Note) 1-2 students are accepted annually from outside the Caribbean e.g. the Philippines and Malaysia

Courses:

*** FOOD AND NUTRITION
3-month intensive course on the implementation of food and nutrition programmes, to improve the skills of government employees involved at the middle-level of food and nutrition related programmes.
Middle-level staff in relevant fields.

**** COMMUNITY NUTRITION
2-week seminars on community nutrition to update knowledge and work effectiveness.
Diploma in community nutrition.

**** FOOD AND NUTRITION
Research fellowships (variable duration) in food and nutrition, to provide relevant individualized experience and training to those in senior or potentially senior posts from universities, government departments, etc.
University graduates.

Note — The Caribbean Food and Nutrition Institute (CFNI), founded in 1967, has as its goal the improvement of the food and nutrition situation in the sixteen member countries through five types of activity: service, education and training, information dissemination, co-ordination and research. Each activity is carried out in close collaboration with the governments.

CFNI is a Pan American Health Organization (PAHO) centre. PAHO represents the WHO in the region of the Americas. The Institute is responsible to an Advisory Committee on Policy, of which the majority represent member governments.

JAM 2 — COLLEGE OF ARTS, SCIENCE AND TECHNOLOGY

Enquiries — Principal, College of Arts, Science and Technology, 237 Old Hope Road, Kingston 6. Tel: 927-6681-6

Managing agency — Ministry of Education

General details — 1)From Sep in 3 terms 2) 1,600 full-time, 1,800 part-time & evening 3) 100m & 50f 4)English 5)About 80 students are accepted annually from overseas, mainly Commonwealth Caribbean countries.

Courses

** PHARMACY
3-year diploma course in pharmacy.
GCE 'O' level in English and maths, chemistry, biology and one other subject.

** MEDICAL TECHNOLOGY/MEDICAL RECORDS
2-year certificate courses in medical records and health statistics, and in medical technology.
As for Pharmacy course, above.

** DIETETICS
2-year certificate course in institutional management with dietetics.
GCE 'O' level in English and 2 other relevant subjects.

Note — The college offers part-time courses for laboratory technicians. A number of sholarships and awards are offered by firms, industrial enterprises and Government. Overseas students have been funded by their Governments and agencies such as CIDA, PAHO, CFTC and ODM.

JAM 3 — DENTAL AUXILIARY SCHOOL

Enquiries — Director, Dental Auxiliary School, Arthur Wint Drive, Kingston 5. Tel: 92-61576, 92-61577, 92-61578

Managing agency — Ministry of Health and Environmental Control

General details — 1)Sep-Jul in 3 terms 2) 55 3)None 4)English 5)About 4 students are accepted annually from Commonwealth Caribbean countries (so far from Barbados, Guyana, Anguilla, Bahamas).

Courses

* DENTAL ASSISTANCE
6-month course for Certificate of Proficiency in Dental Assisting, to provide support staff for dental surgeons and school dental nurses.
Minimum 5 passes at Jamaica School Certificate exam or equivalent (English language compulsory), maximum age 25; preference to workers in dental field.

** DENTAL NURSING
2-year course for Certificate of Proficiency in School of Dental Nursing, to provide staff to give routine dental care to school children in government clinics attached to health centres, hospitals, schools etc.
GCE 'O' level in English and at least two other subjects; age 18-25 years. Preference to workers in the dental field or with experience in child care. Selection by entrance exam.

JAM 4 MINISTRY OF HEALTH - BASIC COURSES FOR NURSING AND PARAMEDICAL PERSONNEL

Enquiries

Ministry of Health and Environmental Control, 21 Slipe Pen Road, Kingston. Or to Principal at individual institutions, as follows:
Cornwall School of Nursing/Midwifery, P.O. Box 900, Montego Bay;
Bellevue School of Nursing, Windward Road, Kingston 2;
EXED Community College, Mountain View Avenue, Kingston;
Kingston School of Nursing, 50 Half Way Tree Road, Kingston;
Spalding School of Nursing, Spalding, Manchester;
Ministry of Health Pharmacy/Community Aide Programmes, 10-11 Caledonia Avenue, Kingston 5.

Courses

The Ministry of Health and Environmental Control organizes a number of courses of training for nursing and paramedical staff in various institutions throughout Jamaica, as listed above. An outline of courses available is given below.

* NURSING
2-year course for assistant nurse certificate.
Minimum secondary level education.

* COMMUNITY HEALTH
Course for community health aide, precise details of which are not currently available.

** NURSING
3-year certificate course in general nursing, for Registered Nurse.
Minimum 3 GCE 'O' levels including English; age 18+.

** PHARMACY
Course for pharmacy technologist, precise details of which are not currently available.

*** MIDWIFERY
10-month certificate course in midwifery, for Registered Midwife.
Registered nurses.

Note

See also JAM 3, JAM 5 and JAM 10.

JAM 5 SCHOOL OF PHYSICAL THERAPY

Enquiries

Principal, School of Physical Therapy, Mona Rehabilitation Centre, Kingston 7. Tel: 937-7209/7276.

Managing agency

Ministry of Health and Environmental Control

General details 1)Sept-Jul 2) 49 3)None 4)English 5)Students from Commonwealth Caribbean countries have been accepted (Trinidad, Barbados, Guyana, St. Kitts), varying from 3 to 6 annually.

Courses

** PHYSICAL THERAPY
3-year diploma course in physical therapy, with internships in physiotherapy hospital departments, wards and intensive care.
GCE 'O' level in 5 subjects, including maths, physics and one other biological science; or 2 'A' levels and 3 'O' levels. Age 18+.

Note The school is funded by tuition fees and the Ministry of Health and Environmental Control. Scholarships are awarded by PAHO, by private companies to children of employees, and through the Government of Jamaica's training programme. The Medical School of the UWI contributes to the programme in the first year in terms of teaching, as the anatomy and physiology course is run by personnel from the School.

JAM 6 UNIVERSITY HOSPITAL OF THE WEST INDIES, DEPARTMENT OF NURSING EDUCATION

Enquiries Admissions Officer, Department of Nursing Education, University Hospital of the West Indies, Mona, Kingston 7. Tel: 927-6621.

General details 1)Mar & Sep 2)c.150 3)Yes 4)English 5)Students are accepted from Caribbean countries and, occasionally, elsewhere.

Courses

** NURSING
3-year course in basic nursing, for Registered Nurse.
GCE 'O' level in minimum of 3 subjects including English and at least one science subject, with evidence of satisfactory standard in maths; age 17-30 (older students considered on basis of previous experience).

*** MIDWIFERY
3-month post-basic course in midwifery.
Registered nurse.

*** INTENSIVE CARE
1-year in-service course in the intensive care unit, covering wide aspects of critical care nursing, including cardiac, paralysed, pre- and post op., dialysis, sickle cell anaemic, and neonatal conditions; care of renal transplant and open heart surgery patients, and of critically sick child, etc. (Course entry Jan & Sep.)
Graduate nurse of any country, registrable in Jamaica.

*** OPERATING THEATRE TECHNIQUES
1-year course in operating theatre techniques, including 9 months experience in all operating rooms, and covering general, rectal, paediatric, orthopaedic, gynaecological, neuro-, ENT, genito-urinary, and chest and vascular surgery, anaesthetics, haemotology, and other topics. (Course entry Jul.)
Graduate nurse with 6-12 months service in operating theatre or other clinical areas of a hospital; age 22-50 years.

Note The University Hospital has had full university status since 1967.

JAM 7 UNIVERSITY HOSPITAL OF THE WEST INDIES, SCHOOL OF RADIOGRAPHY

Enquiries Principal Tutor, School of Radiography, University Hospital, Kingston 7. Tel: (PBX) 76621; telegrapm: Univhosp.

General details 1)From Sep 2)c.15 3)None 4)English 5)Overseas students are accepted, and these are mainly (though not necessarily) from Commonwealth Caribbean countries (see Note).

Courses

** DIAGNOSTIC RADIOLOGY
28-month course in the theory and practice of radiography, leading to the diploma and membership of the College of Radiographers, London. *GCE or equivalent in four subjects with 1 or 2 at 'A' level (there are specific subject combination requirements), or NC or OND in sciences. Selection is at interview.*

Note

This is the only such training programme in the English-speaking Caribbean, and is a regional one. Scholarships are available from the Government or the UWI, and overseas students may be sponsored by their governments through WHO/PAHO or CFTC. Students spend a large portion of their time in the X-ray department of the hopsital but some practical work is carried out also in the Radiography Department. The University Hospital of the West Indies has had full university status since 1967.

JAM 8 UNIVERSITY OF THE WEST INDIES

Enquiries

Registrar, Unviersity of the West Indies, Mona, Kingston 7.
Tel: 92-76661; telegram: Univers Jamaica

General details

1)Oct-Dec, Jan-Mar, Apr-Jun, Jul-Sep 2) 550 3)Yes 4)English
5)Students are accepted from other Commonwealth Caribbean countries, and a small percentage from UK, USA and Canada.

Relevant departments

Anaesthetics - Anatomy - Biochemistry - Child health - Medicine - Microbiology - Obstetrics & gynaecology - Pathology - Pharmacology - Physiology - Psychiatry - Social & preventive medicine - Surgery - Tropical metabolism research unit.

*** NURSING ADMINISTRATION/EDUCATION
Certificate courses for nurse practitioners in nursing administration and nursing education, precise details of which are not currently available.

*** FIRST DEGREES
First degree courses include BSC (Special) Anatomy/or Physiology; 4 years for MBBS.
GCE 'A' level in chemistry, physics, biology/maths or equivalent; minimum age 17+.

**** MASTER'S LEVEL
Master's level courses in surgery, otorhinolaryngology, obstetrics and gynaecology, orthopaedics, medical microbiology, nutrition and various other specialities.

**** DOCTORAL STUDIES
Doctoral studies include PhD in medical microbiology, and DM in anaesthetics, with various other specializations possible.

**** DIPLOMA COURSES
Postgraduate diploma courses in anaesthetics, child health, obstetrics & gynaecology, laboratory medicine, psychiatry, public health, community health, community nutrition, food technology.

JAM 9 WEST INDIES COLLEGE

Enquiries

Principal, West Indies College, Manchester Road, Mandeville P.O., Manchester.

Managing agency

Seventh Day Adventist Church

Courses

** NURSING
Course in general nursing, leading to degree, precise details of which are not currently available.

JAM 10 WEST INDIES SCHOOL OF PUBLIC HEALTH

Enquiries

Director, West Indies School of Public Health, Box 59, Kingston 5, Jamaica, West Indies.

Managing agency

Ministry of Health and Environmental Control

General details

1)Jan-Nov 2)c.150 3)Private accommodation recommended 4)English 5)c.20 students accepted annually from Caribbean countries.

Courses

** PUBLIC HEALTH INSPECTION
18½-month course to prepare paramedicals for public health departments of the region, as well as for private enterprise, and leading to Certificate of the W I School of Public Health and/or Certificate of the Royal Society for the Promotion of Health.
GCE 'O' level in 3 subjects including English language, age 18+.

** WATER CONTROL AND SYSTEMS
12-week Certificate course in water quality control and water systems operation, in-service training to provide first line supervisors to monitor water quality control.
Nominees are usually public health inspectors, works overseers, engineering assistants, pump operators.

*** PUBLIC HEALTH NURSING
10½-month course in public health nursing, covering social and biological science in addition to 6-8 weeks in the clinical area, and leading to Certificate of West Indies School of Public Health and/or Certificate of Royal Society for the Promotion of Health.
Usually Registered Nurses with midwifery certificate and 2-3 years experience, but candidates may have to sit entry examination.

*** OCCUPATIONAL HEALTH
10-week Certificate course in occupational health, to train public health personnel in recognizing, evaluating and controlling some of the most common occupational health hazards of the region.
Nominees are usually public health inspectors and nurses.

Kenya

The Ministry of Health has the overall responsibility for the health services in Kenya. Prior to 1970 local authorities played a big role in health care, but because of inadequate resources the central government has now taken over services in all except the larger municipalities. Government health services, including hospitalization, operations and clinical tests in government hospitals are given practically free.

In the field, health care delivery is organized through district health services, which comprise divisional health centres, village dispensaries, and mobile units where static health units are not feasible. This system is extendable to the smallest of villages and to all parts of the country.

The curative service given at the dispensary level is very basic and the personnel there are trained only to deal with common minor ailments, but there is a line of referral of difficult matters from dispensary to health centre, district hospital, through to provincial hospital; and, for very severe cases, on to the national hospitals. This approach to organization is also used in regard to the delivery and supervision of public health services, health education, nutrition education, family health services and medical supplies.

Non-governmental agencies continue to complement the government effort in providing aspects of health services among the community in many parts of the country. These complementary services are provided by churches and other voluntary organizations, industrial hospitals and medical clinics, private hospitals and general practitioners. Church hospitals provide about 30 per cent of Kenya's hospital bed capacity, and these facilities are often placed among communities in the remote parts of the country. A flying doctor service, run by a voluntary agency, provides another link with inaccessible parts of the country. Non-government health agencies are controlled by government guidelines and are accepted as part of community participation in the health services.

The Ministry of Health has put great emphasis in its programme on maternal and child health services and in the development of basic health services. Nutrition education, particularly in the rural areas, features prominently in these programmes. There is a nutrition section at the Ministry, which supervises the training of field nutritionists, their posting and work in the provinces, districts and health centres. These nutritionists, most of whom have had nursing training and experience are given six months training.

Considerable expansion has been found necessary in the training of nurses and other paramedical personnel, including medical auxiliaries. In 1964 there were 812 students in training compared with 3,561 in 1977. Higher courses are run at the Medical Training Centre and Kenyatta National Hospital in Nairobi. Junior or auxiliary cadres are trained mainly at provincial and district levels, under rather remote supervision of the district hospitals. Medical assistants - or clinical officers as they are known in Kenya - are trained at one of the provincial hospitals with field work in rural health centres. Training has begun for health educators, organized as a one-year in-service course for nurses, health officers and clinical officers. An area which remains to be developed is that of an institute for the training of tutors for all these cadres. Family health field educators, composed of mature women selected from the village where they live and given short-term training on basic aspects of maternal and child health and family planning, also make an important contribution.

At all stages of planning the development of health services and their implementation, the Ministry of Health consults and co-operates with other ministries, local authorities, voluntary organizations and local community organizations. Choice of new developments in any area of the country is largely influenced by local district planning committees and by provincial development committees. This approach ensures that there is community participation in development planning and decision making.

KEN 1 **MEDICAL TRAINING CENTRE**

Enquiries: Principal, Medical Training Centre, P.O. Box 30195, Nairobi. Tel: 336511 Nairobi; telex: "Medtrain".

Managing agency: Ministry of Health

General details: 1)From Jun/Jul 2) 4,504 total, all centres (see Note) 3) 1,003m & 564f 4)English 5)Students have been accepted from neighbouring African countries, c.8 per annum.

Relevant faculties: Clinical medicine - Environmental health - Medical laboratory technology - Nursing - Pharmaceutical technology - Physical medicine - Radiography

Courses:

** CLINICAL MEDICINE
3-year diploma course in clinical medicine, covering prevention of diseases, promotion of family and community health and treatment of common diseases in rural and urban areas.
East Africa Certificate of Education in Division I or II or equivalent, with six credits including English language, biology, physics with chemistry, or general science.

** DENTAL TECHNOLOGY
3-year diploma course in dental technology, to develop skills to design and prepare the dental appliances as specified in dentists' prescriptions.
As for Clinical medicine course above, but subjects to include English language, biology, maths, physics, chemistry or general science.

** ENTOMOLOGICAL FIELD LABORATORY TECHNOLOGY
3-year certificate course in entomological field laboratory technology.
As for Clinical medicine course above, but subjects to include English language, maths, biology, and chemistry or chemistry with physics.

** ENVIRONMENTAL HEALTH
3-year diploma course for environmental health officer; also 2-year certificate course for environmental health technician.
As for Clinical officer course above, but subjects to include English language, maths, biology, and general science, or physics with chemistry, or chemistry with physics, or human biology; for certificate course, EACE in passes seven to include English language or literature, one science and another subject, or 5 passes in KJSE at 'C' level or above, including a pass in English language and a science subject.

** MEDICAL LABORATORY TECHNOLOGY
3-year diploma course in medical laboratory technology; also 3-year certificate course for medical laboratory technician.
As for Clinical officer course, above, but subjects to include English language, maths, biology, and chemistry or chemistry with physics; for certificate course, as for Environmental health technician course, above.

** MEDICAL RECORDS TECHNICIAN
2-year certificate course for medical records technician.
EACE in Division II or III at ordinary level with two credits to include English language or literature, or maths, plus one other credit, and at least three passes in any other subjects.

** NURSING
2½-year course for enrolled nurse and enrolled psychiatric nurse; 3½ years for enrolled community nurse; 3½ years for diploma of Kenya registered nurse.
For enrolled nurse courses, EACE in passes seven to include English language or literature, one science and another subject, or five in KJSE at 'C' level or above including a pass in English language and a science; for KRN, EACE in Division I or II with six credits to include English language, biology, and physics with chemistry, or general science, or physics, or chemistry, or health science, or maths, or food and nutrition, or human biology, or domestic science.

** ORTHOPAEDIC TECHNOLOGY
3-year diploma course in orthopaedic technology, covering aspects of preparation of artificial appliances for physically disabled patients.
As for Clinical medicine course above, but subjects to include English language, biology, maths, physics with chemistry.

PHARMACEUTICAL TECHNOLOGY
3-year diploma course in pharmaceutical technology, covering preparation and dispensing of medicines in all forms under supervision of a pharmacist.
As for Clinical medicine course above, but subjects to include English, maths, biology, chemistry and physics or physical science, or a principal pass 'A' level in chemistry.

** PHYSICAL MEDICINE
3-year diploma courses in physiotherapy and in occupational therapy.
EACE with credits in English, biology, chemistry or physics or physics or with chemistry or general science for physiotherapy course; or six credits to include English and any two science subjects for occupational therapy course.

** RADIOGRAPHIC FILM PROCESSING
2-year certificate course for radiographic film processor.
As for enrolled nursing courses, above.

** RADIOGRAPHY
3-year diploma courses in diagnostic radiography and in therapeutic radiography.
EACE in Division I or II with six credits to include English, maths or physics, and two other science subjects; if English is a pass then a credit in Swahili.

*** CLINICAL MEDICINE
1-year post-basic certificate courses for clinical officers in anaesthesia, ophthalmology, ENT, or paediatrics.
Clinical officer diploma, with three years service.

MEAT AND FOOD INSPECTION
4-month certificate course in meat inspection; 4-month diploma course in meat and other foods inspection.
For certificate, qualified environmental health technicians with three years' service; for diploma, qualified environmental health officers with three years' service.

*** MEDICAL LABORATORY TECHNOLOGY
1-year higher diploma courses in medical laboratory technology specialities (microbiology, etc).
Holders of medical laboratory technology diploma with two years' service.

*** NURSING
Post-basic courses for enrolled nurses include 1 year for enrolled midwife, enrolled public health nurse, and enrolled psychiatric nurse.
Post-basic courses for registered nurses include 1 year for registered midwife, and 1 year for diploma in intensive care nursing, and in public health nursing.
Enrolled/registered nurses, usually with at least 2 years experience (3-5 years for enrolled public health nurse course).

*** PUBLIC HEALTH
1-year diploma course for public health educators, to carry out health education programmes among the general population.
Qualified registered nurses, registered clinical officers and environmental health officers with at least three years' experience.

Note

The Medical Training Centre is a large and complex institution for training Kenya's health service personnel. Apart from the main centre in Nairobi, which has 1,934 students, there are 484 students at the centre in Nakuru and a further 2,086 at other provincial and district schools. Courses are run in collaboration with hospitals and health institutions throughout the country.

KEN 2 UNIVERSITY OF NAIROBI

Enquiries Registrar, P.O. Box 30197, Nairobi. Tel: Nairobi 334244-63; telegram: Varsity, Nairobi.

General details 1)Oct-Sep 2)c.6,000 (all faculties) 3)Yes 4)English 5)Students from other countries are accepted, mainly from African states.

Relevant faculties Agriculture - Education - Engineering - Medicine - Science

Courses

*** NURSING
2-years for diploma in advanced nursing, covering sociology, educational psychology, community health nursing, mental and psychiatric nursing, administration and curriculum development.
Certificate of nurse/midwifery registration, with record of competence in nursing practice.

*** FIRST DEGREES
First degree courses include: 3 years for BSc in anatomy, in biochemistry with options in nutritional/clinical techniques, in food science and technology, and in home economics with option in foods and nutrition; 4 years for pharmacy (BPharm) and for dental surgery (BDS); 5 years for bachelor of medicine (MB, ChB).
Minimum of 5 approved subjects in School Certificate or GCE, of which at least 2 should be at 'A' level.

**** MASTER'S LEVEL
Higher degree courses include: 2 years for MSc Environmental Health Engineering; 2-4 years for MSc in Medicine, and for Master of Medicine in various specialities, including: general medicine, surgery, obstetrics & gynaecology, paediatrics & child health, diagnostic radiology, anaesthesia, ophthalmology.
Appropriate first degree.

**** DOCTORAL STUDIES
Facilities are available for study for the degrees of Doctor of Medicine (by thesis), and for PhD in Faculty of Medicine.
Appropriate first or higher degrees, with evidence of competence to work in chosen field.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Kiribati

Primary health care services in Kiribati, which are free, are delivered through the Ministry of Health and Welfare. On each of the islands with a resident population (total about 52,000) there is a dispensary, staffed by a resident medical assistant and nurse, with facilities for 20 to 40 patients. Most islands have a second nurse, responsible for district health work.

The main medical establishment is the Central Hospital at Bikenibeu, Tarawa which has 150 beds. There is a second general hospital with 60 beds on Ocean Island, operated by the British Phosphate Commissioners for their employees.

None of the serious tropical diseases are found on Kiribati, except for a small and reducing number of cases of leprosy and dysentry. With the assistance of WHO, there has since 1961 been a control programme for tuberculosis, the single major health problem.

KIR 1 **NURSES TRAINING SCHOOL**

Enquiries: Sister Tutor, Nurses Training School, P.O. Box 268, Bikenibeu, Tarawa.

Managing agency: Ministry of Health & Community Affairs

General details: 1)Mar-May, Jun-Aug, Sept-Nov 2) 20 per annum 3) 51 4)English 5)No students from other countries have so far been accepted, although applications have been received from Fiji.

Courses:

** NURSING
3-4 year training course for nurses, leading to Registered Nurse.
Form III, age 17-18 years

*** MEDICAL ASSISTANT
1-year course leading to Medical Assistant Certificate, to service non-airfield islands of the group, and bridge the gap of shortage of doctors.
Selection from existing nursing staff of good calibre with 4-5 years experience at main hospital and outer islands.

Lesotho

In recent years Lesotho has been engaged on upgrading the 88 rural health centres. Drugs and equipment used in the rural areas are already standardized. A special rural allowance and improved accommodation are under active consideration in order to encourage doctors to work in the periphery. Because of the shortage of doctors Lesotho's Dangerous Medicines Act gives the Minister of Health power to allow "certain categories of health personnel to perform certain acts normally performed by qualified doctors".

Since 1975 there has been a change in the health delivery system, with the co-operation of the peripheral hospitals, one government and the other run by the Private Health Association of Lesotho. Doctors have established liaison with villages by way of voluntary health workers who are briefed at least once a month at the hospital and then go back to their villages to identify cases for preventive medicine as well as cases needing urgent attention. The use of these voluntary health workers has made medicine and medical staff more acceptable and has improved the general health of the people.

With the assistance of Ministry of Community Development piped water is already available to many parts of the rural areas. Pit latrines have also been built. Health education is conducted by means of radio, schools, and local newspapers as well as by public health lectures. Disaster relief committees have also been formed.

Lesotho like other developing countries still has malnutrition problems. In 1960 a permanent Bureau of Nutrition was established to co-ordinate food and nutrition activities. Trained nutritionists and home economists undertake demonstrations and hold courses on nutrition. Food supplements of the World Food Programme and catholic relief services have been of considerable assistance. By these means there has in recent years been a considerable reduction in the incidence of malnutrition.

LES 1 HEALTH ASSISTANTS' SCHOOL

Enquiries: Senior Medical Officer of Health, Ministry of Health, Health Assistant's School, P.O. Box 514, Maseru 100.

Managing agency: Ministry of Health

General details: 1)Apr-Sep, Oct-Mar 2) 12 3)None 4)English 5)No foreign students have so far been accepted.

Courses:

** HEALTH EDUCATION
2-year certificate course for health assistant, to provide auxiliary personnel in public health, and primary health care, based at health centres, clinics and growth centres. Course covers communicable diseases, water supplies, food sanitation, refuse, rodent control, nutrition, housing, drainage and sewerage systems, building construction, meat hygiene and inspection, and other subjects.
Cambridge Overseas School Certificate or GCE.

LES 2 MALUTI ADVENTIST HOSPITAL

Enquiries: Hospital Administrator, Maluti Adventist Hospital, P.O. Box MG 11, Mapoteng.

Managing agency: Southern Union of Seventh Day Adventists (Johannesburg)

General details: 1)From May 2)c.65 3)Yes 4)English (Sesotho to patients) 5)Up to 6 foreign students are admitted annually.

Courses

* NURSING
1-year course for assistant nurse.
No formal qualification required.

** NURSING/MIDWIFERY
3½-year general nursing course leading to qualification of registered nurse. As well as theoretical training, practical field work is provided by out-clinics, field trip to mental hospital, water purification plant, and sewerage disposal plant. A further 1-year midwifery course is available.
High School certificate with at least 4 passes, including English and preferably science or maths.

LES 3 **QUEEN ELIZABETH II HOSPITAL**

Enquiries: Chief-Principal Nursing/Tutor, Queen Elizabeth II Hospital, School of Nursing, P.O. Box 122, Maseru, 100.

General details: 1)Jul & Feb 2)c.50 3)Yes 4)English 5)Up to 2 students from other countries are accepted each year.

Courses

** NURSING
3-year programme for state registered general nurse, including 1 month practical field work at a rural health centre.
Cambridge Overseas School Certificate.

Note: The School also provides training for nurse assistants, health assistants, dispensers, and midwives.

LES 4 **ROMA SCHOOL OF NURSING**

Enquiries: Principal, Roma School of Nursing, P.O. Box 26, Roma.

Managing agency: St. Joseph's Hospital, Roma (Roman Catholic Church)

General details: 1)From Feb 2) 32 3)Yes 4)English 5)No students from other countries have so far been accepted.

Courses

** NURSING
3-year programme for state registered general nurse.
Good Cambridge Overseas School Certificate, and good testimonials.

LES 5 **SCOTT HOSPITAL**

Enquiries: Medical Superintendent, Scott Hospital, P.O. Box 9, Morija.

Managing agency: Lesotho Evangelical Church

General details: 1)Jan for Nurse Asst., others Jun/Jul 2) 25 3)Yes 4)English 5)No students from other countries are at present accepted.

Courses

* NURSING
1-year course for nurse assistant.
Form B or its equivalent.

* NURSING/MIDWIFERY
3-year course for enrolled general nurse, to train nurses to work in preventive health needs (rural areas) and curative needs (hospital). The course is normally preceded by 3 months probation (Mar-May). 1-year further training for enrolled midwife.
Junior Certificate of Education.

** MIDWIFERY
1-year upgrading to registered midwife for existing enrolled midwives.
EN general and EM.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Malawi

The Ministry of Health is the responsible authority on all health matters in Malawi. The provision of the services, however, is principally divided between the Government and PHAM (Private Hospital Association of Malawi - an organization formed by Mission Hospitals) on the one hand, and private agencies and traditional practitioners on the other. The Ministry of Health is the coordinating authority and is responsible for about 50 per cent of the health services. It disposes of 4,000 beds. PHAM, which is the coordinating body of all church-related health services, disposes of about 4,000 beds and is responsible for 40 per cent of the health services. Local government and the other agencies constitute the remaining 10 per cent of the health services provided, and are responsible for the additional 1,000 beds.

There are altogether 535 health units in the country with a total of 9,617 beds, one third of which are maternity beds shared between various agencies. Bed population ratio now stands at 1.7 beds per 1,000.

The health strategy which was drafted with World Health Organization collaboration in 1971 forms the National 15-Year Health Plan (1973-1985) which is the keystone for Malawi's Health Services development. The first five years period called the MINIPLAN (1973-1978) which has elapsed, was designed to achieve improvement of child health services, to increase coverage of protection amongst both children under the age of five and nursing mothers, and to provide health education, national surveillance and other measures to reduce existing high rates of morbidity and mortality due to some communicable diseases.

To meet the needs of a projected population of 6.5 million at the end of the 15-Year National Plan it is estimated that the following health units will be required: 130 primary health centres, 520 sub-centres and 2,080 health posts. A primary health centre should provide medical care for 50,000 population. Within each primary health centre there should be four sub-centres, each serving 10,000 population. Each sub-centre should consist of four health posts, each serving a population of 2,000. There should be a radius of 10 miles between primary health centres and 5 miles between each sub-centre.

Each of the 24 districts in the country has a hospital which is the nucleus of health activities at the district level. It is most often located in the administrative centre of the district and there are 21 such district hospitals. Two central hospitals, in Lilongwe and Blantyre, and one general hospital in Zomba, serve both as district as well as referral hospitals. The medical officer or the senior clinical officer-in-charge of the district hospital is responsible for both curative and preventive services within the district. In carrying out preventive activities, he is assisted by the district health inspector and the district maternity and child health coordinator.

The district health inspector and the MCH coordinators are supervised by a regional health inspector and a regional MCH supervisor respectively. PHAM also plays an important role in providing both curative and preventive services, and is responsible for 20 district hospitals and 94 sub-centres.

Whilst 300 under-five clinics were functioning in 1972, reaching an average of 20 per cent of the total population under five years, the number had increased by the end of 1977 to 848 under-five clinics, reaching around 50 per cent of children in the 0-4 years age group. There are now 212 maternities, all of them running ante-natal clinics.

MAW 1-17 **BASIC COURSES FOR NURSING AND HEALTH SERVICE PERSONNEL**

Enquiries: Secretary for Health, Ministry of Health, P.O. Box 30377, Capital City, Lilongwe 3.

Managing agencies: See individual list of institutions.

Courses: Courses of training similar to those outlined below in (a) to (h) take place in a number of hospitals and training institutions throughout Malawi. Following this list of courses is an individual list of institutions (MAW 1-17) giving their location, managing bodies, and an indication of which of the courses (a) to (h) take place there.

(a) * LABORATORY TECHNOLOGY
2-year course of training for laboratory assistants.
Junior Certificate of Education.

(b) * NURSING
2-year course of training for enrolled nurse.
Junior Certificate of Education.

(c) * MIDWIFERY
1 or 2 years for enrolled midwife.
Junior Certificate of Education for 2-year course; 1-year course is for enrolled nurses.

(d) * HEALTH EDUCATION
2-year basic course in health education.
Junior Certificate of Education.

(e) * PHARMACY
2-year course of training for pharmacy assistant.
Junior Certificate of Education.

(f) * MEDICAL ASSISTANT
3 or 4-year course of training for medical assistant.
Junior Certificate of Education.

(g) ** NURSING/MIDWIFERY
3 years for registered nurse, which may be followed by further 1-year course for registered midwife.
Malawi Certificate of Education/GCE.

(h) ** CLINICAL OFFICER
3-year course of training for clinical officer.
Malawi Certificate of Education/GCE.

MAW 1 **EKWENDI HOSPITAL SCHOOL OF NURSING, EKWENDENI**
Managing agency: CCAP.
Courses: (c) 2-year.

MAW 2 **KAMUZU COLLEGE OF NURSING, BLANTYRE**
Managing agency: Ministry of Health
Courses: (g), both courses.

MAW 3 **KAMAZU MEDICAL AUXILIARY TRAINING SCHOOL LILONGWE**
Managing agency: Ministry of Health
Courses: (a), (e) and (h).

MAW 4 **LIKUNI HOSPITAL SCHOOL OF NURSING, LIKUNI**
Managing agency: Roman Catholic Church
Courses: (b) and (c) 1-year course

MAW 5 **MALAMULO HOSPITAL SCHOOL OF NURSING, MAKWASA**
Managing agency: Seventh Day Adventists
Courses: (a), (b), (c) 1-year course, and (f) 4-year course.

MAW 6 **MALOSA HOSPITAL SCHOOL OF NURSING**
Managing agency: United Medical Christian Association
Courses: (b).

MAW 7 **MEDICAL ASSISTANT TRAINING SCHOOL, MLAMBE HOSPITAL, BLANTYRE**
Managing agency Roman Catholic Church (Ministry of Health shortly taking over)
Courses (f).

MAW 8 **MEDICAL ASSISTANT TRAINING SCHOOL, QUEEN ELIZABETH CENTRAL HOSPITAL**
Managing agency Ministry of Health
Courses (f).

MAW 9 **MULANJE MISSION HOSPITAL SCHOOL OF NURSING, MULANJE**
Managing agency CCAP
Courses (c) 2-year course.

MAW 10 **NGULUNDI HOSPITAL SCHOOL OF NURSING, LIMBE**
Managing agency Roman Catholic Church
Courses (b) and (c) 1-year course.

MAW 11 **NKHOMA HOSPITAL SCHOOL OF NURSING, NKOMA**
Managing agency CCAP
Courses (b) and (c) 1-year course.

MAW 12 **PHALOMBE HOSPITAL SCHOOL OF NURSING, PHALOMBE**
Managing agency Roman Catholic Church
Courses (b) and (c) 1-year course.

MAW 13 **ST ANNE'S HOSPITAL SCHOOL OF NURSING NKHOTA-KOTA**
Managing agency United Medical Christian Association
Courses (c) 2-year course.

MAW 14 **ST JOHN'S HOSPITAL SCHOOL OF NURSING, MZUZU**
Managing agency Roman Catholic Church
Courses (b) and (c) 1-year course.

MAW 15 **SCHOOL OF HYGIENE, ZOMBA**
Managing agency Ministry of Health
Courses (d).

MAW 16 **TRINITY HOSPITAL SCHOOL OF NURSING, CHIROMO**
Managing agency Roman Catholic Church
Courses (b) and (c) 1-year course.

MAW 17 **ZOMBA SCHOOL OF NURSING, ZOMBA**
Managing agency Ministry of Health
Courses (b) and (c) 1-year course.

MAW 18 **THE POLYTECHNIC**

Enquiries Principal, The Polytechnic, Private Bag 303, Chichiri, Blantyre 3. Tel: 32144.

Managing agency University of Malawi.

General details 1) Sep-Jul 2) c.100 3) None 4) English 5) No students from other countries have so far been accepted.

Courses ** LABORATORY TECHNOLOGY
2-year certificate course for laboratory technicians; also, 3-year diploma course for laboratory technicians.
Malawi Certificate of Education, or GCE, with certain subject requirements.

** PUBLIC HEALTH
2-year up-grading course for health assistants to qualify as health inspectors; also, 3-year diploma course for public health inspector.
In-service health assistants for up-grading course; Malawi Certificate of Education or equivalent for diploma course.

*** MEAT AND FOODS INSPECTION
6-month course in food inspection, leading to Meat and Other Foods Certificate.
Qualified public health inspectors (diploma or certificate) with two years practical experience.

Note — Discussions are taking place with Ministry of Health and the University of Malawi regarding the feasibility of a postgraduate course for medical tutors with emphasis on health administration.

MAW 19 **UNIVERSITY OF MALAWI**

Enquiries — Registrar, University of Malawi, University Office, P.O. Box 278, Zomba. Tel: 394; telegrams: University Zomba.

General details — 1) Sep-Jul in 3 terms 2) 1,147 3) Yes 4) English

Relevant faculties — Science - Technology

Relevant departments — Biology - Chemistry - Human behaviour - Physics - Public administration - Rural development

Courses

** VARIOUS
3-year sub-graduate courses in laboratory technology, public health inspection.

*** FIRST DEGREES
4-year courses in science: 3rd and 4th year specialization subjects may include biology, human behaviour.
5 SC credits or GCE 'O' level passes, with English, maths and a science subject compulsory.

**** MASTER'S LEVEL
Courses of 2-4 years after first degree.

**** DOCTORAL STUDIES
PhD requires 3-5 years.

Note — The university was founded in 1964 and comprises three constituent institutions - Bunda College of Agriculture, Chancellor College, and the Polytechnic (see MAW 19). The number of students entering the university is restricted in accordance with manpower needs of the country.

Malaysia

The strategy of the Community Health Movement (as Malaysia's primary health care programme is termed) is first to identify the under-served areas. This is followed by a survey of the under-served villages to identify local material and manpower resources which may be utilized to improve health. Through village-level consultations the communities identify the minimum health and health-related activities, and which local resources can be employed.

In the first phase, 44 ANP districts have been surveyed (ANP denotes Applied Food and Nutrition Programme). The Community Health Movement in these districts will be implemented in 1979. In the second phase, the rest of Malaysia will be surveyed and the Community Health Movement implemented in 1981, thereby giving a total coverage of the whole population by 1981 - before comprehensive health services cover the total population at the earliest by 1985.

In-depth studies are necessary in selected districts as well as in served and over-served areas. One main aim is to develop a practical permanent health delivery system to cover the under-served areas from 1981 onwards.

MAY 1-26 BASIC TRAINING COURSES FOR NURSING PERSONNEL

Enquiries Ministry of Health Malaysia, Jalan Young, Kuala Lumpur. Tel: 85131; telegram: MinHealth, Kuala Lumpur.

Managing agency Ministry of Health (unless otherwise stated in individual list of institutions)

Courses Courses of basic training similar to those outlined below (a-f) take place in a number of hospitals and training institutions throughout Malaysia. Following this list of courses is an individual list of institutions (MAY 1-26), giving their location, and an indication of which of these courses take place there. (Most courses are given in English and Malay language).

(a) * NURSING
2-year course for assistant nurse, and leading to Certificate of Assistant Nurses.
Lower Certificate of Education or equivalent; female only, age up to 24 years.

(b) * MIDWIFERY
2-year course in midwifery, and leading to Certificate in Midwifery Division Two.
Lower Certificate of Education or equivalent; female only, age 18-25 years.

(c) * HOSPITAL ASSISTANT (PSYCHIATRIC)
2-year course leading to Certificate of Junior Hospital Assistant (Psychiatric).
Lower Certificate of Education or equivalent; male only, age up to 24 years.

(d) ** HOSPITAL ASSISTANT
3-year course leading to Certificate of Hospital Assistant.
Malaysia Certificate of Education or equivalent, with at least a pass in Malay language; male only, age up to 24 years.

(e) ** NURSING
3-year basic nursing programme, leading to Certificate in Nursing (SRN).
Malaysia Certificate of Education or its equivalent with at least a pass in Malay language; female only, age up to 24 years.

(f) *** MIDWIFERY
1-year course in midwifery, and leading to Certificate in Midwifery Division One.
State registered nurses, confirmed in service, age below 40 years.

MAY 1 (GENERAL HOSPITAL) ALOR SETAR, KEDAH
Courses (a), (b)

MAY 2 (DISTRICT HOSPITAL) BATU GAJAH, PERAK
Courses (a), (b)

MAY 3 (DISTRICT HOSPITAL) BATU PAHAT
Courses (b)

MAY 4 (DISTRICT HOSPITAL) BENTONG, PAHANG
Courses (b)

MAY 5 (DISTRICT HOSPITAL) BUKIT MERTAJAM, PULAU PINANG
Courses (a), (b)

MAY 6 (GENERAL HOSPITAL) IPOH, PERAK
Courses (a), (e), (f)

MAY 7 (GENERAL HOSPITAL) JOHOR BHARU, JOHOR
Courses (e), (f)

MAY 8 (MENTAL HOSPITAL TAMPOI) JOHOR BHARU, JOHOR
Courses (c)

MAY 9 (GENERAL HOSPITAL) KLANG, SELANGOR
Courses (a), (b)

MAY 10 (DISTRICT HOSPITAL) KLUANG, JOHOR
Courses (a), (b)

MAY 11 (GENERAL HOSPITAL) KOTA BHARU, KELANTAN
Courses (a), (b), (e).

MAY 12 (DISTRICT HOSPITAL) KUALA LIPIS, PAHANG
Courses (a)

MAY 13 (GENERAL HOSPITAL) KUALA LUMPUR
Courses (e), (f)

MAY 14 (DISTRICT HOSPITAL) KUALA PILAH, NEGERI SEMBILAN
Courses (a)

MAY 15 (GENERAL HOSPITAL) KUALA TRENGGANU, TRENGGANU
Courses (a), (b)

MAY 16 (GENERAL HOSPITAL) KUANTAN, PAHANG
Courses (a), (b)

MAY 17 (GENERAL HOSPITAL) MELAKA
Courses (e)

MAY 18 (DISTRICT HOSPITAL) MUAR, JOHOR
Courses (a)

MAY 19 (ASSUNTA HOSPITAL), PETALING JAYA, SELANGOR
Managing agency Assunta Hospital
Courses (e)

MAY 20 (GENERAL HOSPITAL) PULAU PINANG
Courses (e), (f)

MAY 21 **(GENERAL HOSPITAL) SEREMBAN, NEGERI SEMBILAN**
Courses (a), (b), (d)

MAY 22 **(NATIONAL LEPROSY CONTROL CENTRE) SUNGAI BULOH, SENANGOR**
Courses (a)

MAY 23 **(DISTRICT HOSPITAL) SUNGAI PATANI, KEDAH**
Courses (a), (b)

MAY 24 **(DISTRICT HOSPITAL) TAIPING, PERAK**
Courses (a), (b)

MAY 25 **(DISTRICT HOSPITAL) ULU KINTA, PERAK**
Courses (a)

MAY 26 **(MENTAL HOSPITAL) ULU KINTA, PERAK**
Courses (c)

MAY 27 **DENTAL TRAINING SCHOOL**

Enquiries Director, Dental Training School, Jalan Sepoy Lines, Pulau Pinang

Managing agency Ministry of Health Malaysia

General details 1)From Nov 2) 297 3)Yes 4)English and Malay 5)Students from other countries are accepted.

Courses

** DENTAL NURSING
3-year course in dental nursing, leading to Certificate in Dental Nursing.
Malaysia Certificate of Education or equivalent, with at least a pass in Malay; female only, age up to 24 years.

** DENTAL TECHNICIAN
3-year course for dental technician, leading to Certificate of Dental Technician.
As for Dental nursing course, above, but both male and female accepted.

MAY 28 **INSTITUTE FOR MEDICAL RESEARCH**

School of Junior Laboratory Assistants
School of Medical Laboratory Technology

Enquiries Principal (of respective School), Institute for Medical Research, Jalan Pahang, Kuala Lumpur.

Managing agency Ministry of Health Malaysia

General details 1)Jan & Jul for 1-year course, Oct for 3-year course 2) 480 3)Yes 4)English and Malay (postgraduate in English) 5)Students from other countries are not normally accepted.

Courses

* LABORATORY ASSISTANT
1-year pre-service course leading to Certificate of Junior Laboratory Assistant.
Lower Certificate of Education with at least a pass in Malay language; age up to 25 years.

** MEDICAL LABORATORY TECHNOLOGY
3-year course leading to Certificate of Medical Laboratory Technologist.
Malaysia Certificate of Education or equivalent, with at least a pass in Malay language; age up to 24 years.

(Continued)

**** PARASITOLOGY AND ENTOMOLOGY
6-month diploma course designed to give a deeper understanding of the causes, diagnosis, mode of transmission, epidemiology, control and prevention of parasitic and vector-borne diseases of man and domestic animals, with special reference to those occuring in South East Asian region. (This course normally takes place April-September.)
Medical, veterinary and science graduates of an approved university. Others with an approved qualification and previous training may be admitted at the discretion of the Board of Studies; age below 45 years.

MAY 29 **MEDICAL LABORATORY & STORE**

School of Dispensing
School of Pharmaceutical Laboratory Assistant

Enquiries: Principal (of respective School), Medical Laboratory & Store, Petaling Jaya, Selangor.

General details: 1)From July 2) 360 (dispensing) and 31 3)None 4)English and Malay 5)Students from other countries are not normally accepted.

Courses:

** DISPENSING
3-year course, leading to Certificate in Dispensing.
Malaysia Certificate of Education or equivalent with at least a pass in Malay; age up to 24 years.

** PHARMACEUTICAL TECHNOLOGY
3-year course for laboratory assistants, leading to Certificate of Pharmaceutical Laboratory Assistant.
As for Dispensing course, above.

MAY 30 **NATIONAL UNIVERSITY OF MALAYSIA**

Enquiries: Dean, Faculty of Medicine, National University of Malaysia, Jalan Raja Muda, P.O. Box 2418, Kuala Lumpur 01-02.

General details: 1)Jun-May 2) 582 3)Yes 4)English & Malay 5)Students from Indonesia have been accepted, the number depending on applications.

Relevant departments: Anatomy - Biochemistry - Physiology - Parasitology - Community health - Pathology - Pharmacology - Microbiology - Medicine - Surgery - ENY - Paediatrics - Obstetrics & gynaecology - Anaesthesiology - Radiology - Orthopaedics - Ophthalmology - Psychiatry.

Selected courses:

*** FIRST DEGREES
6 years for first degree in medicine and surgery (MBBS).
Higher School Certificate/'A' level/University matriculation course, or acceptable equivalent.

MAY 31 **PHYSIOTHERAPIST TRAINING SCHOOL**

Enquiries: Principal, Physiotherapist Training School, General Hospital, Kuala Lumpur.

Managing agency: Ministry of Health Malaysia

General details: 1)From Nov 2) 60 3)None 4)English and Malay 5)No students from overseas have so far been accepted.

(Continued)

Courses

** PHYSIOTHERAPY
3-year Certificate course in physiotherapy.
Malaysia Certificate of Education or equivalent with at least a pass in Malay, English and credits in maths and a science other than health science; age up to 24 years.

MAY 32 **PUBLIC HEALTH INSTITUTE**

Enquiries Director, Public Health Institute, Jalan Bangsar, Kuala Lumpur.

Managing agency Ministry of Health Malaysia

General details 1)From Jul (also from Jan for Health Visitors course) 2) 435 3)Yes, except for in-service students 4)English and Malay 5)Students from other countries are not normally accepted.

Courses

** HEALTH EDUCATION
21-month in-service course in health education to prepare professional health education officers.
Officers appointed in service.

** PUBLIC HEALTH
3-year course for public health inspector, and leading to Diploma of the Royal Society of Health (London) for Public Health Inspector.
Malaysia Certificate of Education or equivalent with at least a credit in Malay and pass in a science subject, excluding health science; male only, age up to 24 years.

*** PUBLIC HEALTH
6-month course for health visitors, and leading to Health Visitor and School Nurses Certificate of the Royal Society of Public Health (UK).
Staff nurses and nursing sisters confirmed in service, holding midwifery certificate division one, age up to 40 years.

MAY 33 **RURAL HEALTH TRAINING SCHOOL**

Enquiries Principal, Rural Health Training School, Jitra, Kedah.
Principal, Rural Health Training School, Rembau, Negeri Sembilan.

Managing agency Ministry of Health Malaysia

General details 1)Jan & Jul 2) 54 at each location 3)Yes 4)English and Malay 5)Students from other countries are not normally accepted.

Courses

** PUBLIC HEALTH
6-month course leading to Certificate of Public Health Overseer.
Officers appointed in service.

*** RURAL NURSE
6-month course leading to Certificate of Rural Nurse.
Qualified midwife, confirmed in service; age not more than 45 years.

MAY 34 **SCHOOL OF POST-BASIC NURSING**

Enquiries — Principal, School of Post-Basic Nursing, General Hospital, Kuala Lumpur.

Managing agency — Ministry of Health Malaysia

General details — 1)Varies 2)c.150 3)Yes 4)English and Malay 5)Students from other countries are not normally accepted.

Courses

*** CENTRAL STERILE SUPPLY TECHNIQUES
4-month course leading to Certificate of Post-Basic Nursing in Central Sterile Supply Techniques.
State registered nurse with at least three years experience, and Certificate in Midwifery division one; age up to 40 years.

*** INTENSIVE CARE
4-month course leading to Certificate of Post-Basic Nursing in Intensive Coronary Care Nursing.
State registered nurse or hospital assistant with at least three years experience; age up to 40 years.

*** OPERATING THEATRE TECHNIQUES
6-month course leading to Certificate of Post-Basic Nursing in Operating Theatre Techniques.
As for Intensive care course, above; staff nurses should hold midwifery certificate division one.

*** OPHTHALMIC NURSING
6-month course leading to Certificate of Post-Basic Nursing in Ophthalmic Nursing.
As for Operating theatre techniques course, above.

*** ORTHOPAEDICS NURSING
6-month course leading to Certificate of Post-Basic Nursing in Orthopaedics Nursing.
As for Operating theatre techniques course, above.

*** PAEDIATRICS NURSING
6-month course leading to Certificate of Post-Basic Nursing in Paediatrics Nursing.
As for Operating theatre techniques course, above.

*** PSYCHIATRIC NURSING
1-year course leading to Certificate of Post-Basic Nursing in Psychiatric Nursing.
As for Operating theatre techniques course, above.

*** WARD MANAGEMENT
4-month course leading to Certificate of Post-Basic Nursing in Ward Management.
As for Central sterile supply techniques course, above.

MAY 35 SCHOOL OF RADIOGRAPHY & RADIOTHERAPY

Enquiries: Principal, School of Radiography & Radiotherapy, General Hospital, Kuala Lumpur. Tel: 03-290421 ext 437

Managing agency: Ministry of Health Malaysia

General details: 1)Nov to Oct 2) 45 3)None 4)English and Malay 5)So far, one student has been accepted from Botswana.

Courses:

** RADIOGRAPHY
2-year course in diagnostic radiography.
Malaysia Certificate of Education, or GCE 'O' level or equivalent, in 5 subjects including English, Malay, maths and a science; minimum age 18 years and medically fit.

** RADIOTHERAPY
2-year course in therapeutic radiotherapy.
As for Radiography course, above.

Note: There is also a 2-week refresher programme for qualified radiographers throughout the states of Malaysia (this includes Sabah and Sarawak). The School was established in 1963 with initial help from Colombo Plan experts, and is the only one of its kind in Malaysia. Competition for places is high, and the pattern of training is based on rules and regulations of the College of Radiographers, London, the examination being based on the same syllabus.

MAY 36 UNIVERSITY OF SCIENCE, MALAYSIA

Enquiries: Dean, School of Pharmaceutical Sciences, University of Science, Malaysia, Minden, Penang. Tel: 883882 ext 295; telegram: Unisains

General details: 1)Jun-Jun 2) 192 3)Yes 4)English & Malay 5)Students from other countries have not so far attended, but are in principle acceptable.

Selected courses:

*** FIRST DEGREES
4-year general and honours degree courses in pharmaceutical sciences; disciplines offered are: pharmaceutical chemistry, pharmaceutical technology, physiology, pharmacology, and clinical pharmacy.
Higher School Certificate/STP level.

MAY 37 UNIVERSITY OF MALAYA

Enquiries: Registrar, University of Malaya, Pantai Valley, Kuala Lumpur 22-11.

General details: 1)May-Jun in 3 terms (post-basic nursing programmes start Oct) 2) 888 (enrolment in dentistry, medicine & nursing) 3) 3941 4)English & Malay 5)About 33 students, mainly from Asian and Commonwealth countries are accepted annually, largely on post-graduate medical courses.

Relevant faculties/ departments: Dentistry: Children's dentistry - Conservative dentistry - oral pathology & oral medicine - Oral surgery - Preventive dentistry - Prosthetics.
Medicine: Anaesthesiology - Anatomy - Biochemistry - Physiology - Radiology - Paediatrics - Medical microbiology - Pharmacology - Parasitology - Pathology - Post-basic nursing - Surgery - Orthopaedic surgery - Obstetrics & gynaecology - Medicine - Psychological medicine - Social & preventive medicine - Otorhinolaryngology - Ophthalmology.

Selected courses

** MEDICAL LABORATORY TECHNOLOGY
3 years for ordinary level certificate course in medical laboratory technology; 2 further years for advanced certificate.
Malaysia School Certificate or GCE with credits in science and maths.

** NURSING
3-year basic nursing programme.
Malaysian School Certificate or equivalent with credit in Malay Language and general science, and passes in maths and English.

*** NURSING/MIDWIFERY
1-year post-basic programmes in nursing administration, and for nurse tutor (general) and midwifery tutor.
State registered nurse or (for nurse tutor programme only) hospital assistant with at least 4 years experience, holding midwifery certificate division one, age below 40 years.

*** FIRST DEGREES
5 years for medicine and surgery (MBBS); 4 years, plus 1 year in medical science, for dentistry (BDS).
Higher School Certificate, with specific subject and level requirements depending on course taken.

**** MASTER'S LEVEL
1-year for master's degree in pathology and in public health; 2 years in psychological medicine.
Appropriate first degree.

**** DOCTORAL STUDIES
PhD requires 2 years; DSc (awarded on published work) is open to holders of MBBS(UM) of 7 years and a higher degree or PhD(UM) of 5 years.

Note

The University has a 850 bed teaching hospital and a 90 chair dental clinic.

MAY 38 **SABAH : PARA-MEDICAL TRAINING**

Enquiries

Director, Medical Department, Sabah.

Managing Agency

Medical Department, Sabah.

Courses

* NURSING
2-year Certificate courses in Rural health nursing and Psychiatric nursing at the Training Schools, Kota Kinabalu; 2-year Certificate course in Assistant Nursing at the Duchess of Kent Hospital, Sandakan and at the District Hospital, Tawau.
Lower Certificate of Education

** NURSING
3-year Certificate courses for men and women in general nursing for Registered nurse at the Queen Elizabeth Hospital, Kota Kinabalu.
Malaysian Certificate of Education or equivalent.

*** MIDWIFERY
1-year Certificate course in midwifery for Registered midwife at the Queen Elizabeth Hospital, Kota Kinabalu.
State Registered Nurse.

MAY 39 SARAWAK: PARA-MEDICAL TRAINING

Enquiries Director, Medical Department, Sarawak.

Managing agency Medical Department, Sarawak.

Courses

* PARA-MEDICAL
6-months Certificate course for Dental surgery assistant; 9-months Certificate courses for Rural health supervisor and for X-ray film developer; 1-year Certificate course for Junior laboratory technician; 2-year Certificate courses for Community nurse and for Junior hospital assistant.
Lower Certificate of Education or equivalent.

** NURSING
3-year Certificate courses for Hospital assistant and for Registered nurse.
Malaysian Certificate of Education or equivalent.

*** MIDWIFERY
1-year Certificate course in midwifery for Registered midwife.
Qualified Staff Nurse

Note Most of the above courses take place at the School of Para-medical Personnel, the General Hospital, Kuching.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Malta

The Maltese community is served by a comprehensive system of primary health care, which provides for the individuals' needs at the different stages of life.

There are 13 hospitals in Malta and Gozo, 10 of which are Government run, with a total of 3,500 beds. The ratio of population to physicians is about 1000:1. Midwifery ante-natal, child health, immunization, school medicine and dentistry services are all free. Other services are free of charge to those below a certain income level.

In its development plan (1973-8) the Government is improving and expanding the range of services available to the community, including the improvement of hospital services, care of the aged and disabled; domiciliary nursing, midwifery, physiotherapy and psychiatric social work.

MAT 1 **PARAMEDICAL COURSES OF THE DEPARTMENT OF HEALTH**

Eqnuiries: Senior Medical Officer, Department of Health, 15 Merchants Street, Valletta. Tel: Cent. 24071

Managing agency: Department of Health

General details: 1)Frequency of courses depends on needs of the Medical Services

Relevant departments: Physiotherapy - Radiography - Microbiology and Pathology

Courses:

** PHYSIOTHERAPY
3 years for Diploma.
Malta Matriculation or GCE 'O' levels in English, Maltese, maths and three other subjects. Age 17 years.

** RADIOGRAPHY
2 years for Diploma. The syllabus is based on that of the UK Society of Radiographers.
As for Physiotherapy but the 3 other subjects must be chemistry, physics and biology. Age 18 years.

** MEDICAL LABORATORY TECHNOLOGY
3 years for Diploma, at the level of the intermediate examination of the UK Institute of Medical Laboratory Technicians.
As for Radiography, above. Age 17 years.

The 3 courses are based on St Luke's Hospital (see MAT 2). The Physiotherapy course started in 1976 with the support of UNDP/WHO. It includes lectures at the School of Nursing and the University of Malta. Some lectures for the Radiography course are given at the School of Nursing. ETR-77

MAT 2 **ST. LUKE'S SCHOOL OF NURSING**

Enquiries: Principal Nurse Tutor, St. Luke's School of Nursing, St. Luke's Hospital.

Managing agency: Ministry of Health

Courses:

** NURSING
3-year certificate course in general nursing for Registered nurse.
Malta Matriculation or GCE 'O' levels. Aged 18.

*** MIDWIFERY
1-year certificate course for Registered midwife.
Registered nurse.

Note — There is also a programme of training of 2 years 1 month for Enrolled nurse. See also MAT 1.

MAT 3 **UNIVERSITY OF MALTA**

Enquiries — Registrar, University of Malta, Msida. Tel: 36451; telegram: University.

General details — 1)Oct-May in 3 terms 2)1,123 4)English 5)About 30 students from other countries are accepted annually.

Relevant faculties — Dental surgery - Medicine and surgery

Relevant departments — Anatomy and histology - Community medicine - Dental surgery - Medicine - Obstetrics & gynaecology - Pathology - Pharmacy - Physiology & biochemistry - Surgery

Selected courses

*** FIRST DEGREES
3-year first degree course with honours specializations in pharmacy; 4 years in dental surgery; 5 years in medicine and surgery.
GCE in six subjects, including at least two at 'A' level; or in 5 subjects including at least 3 at 'A' level: English language obligatory. Age 17+.

**** MASTER'S LEVEL
MPhil requires 4 terms after first degree.

**** DOCTORAL STUDIES
PhD requires 8 terms after master's degree.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Mauritius

Mauritius is composed of the main island of Mauritius, with an area of 720 sq. miles, population 881,000; the island of Rodrigues, 36 sq. miles, population 30,000; and a number of islets and atolls with a population of about 300.

Primary health care is provided free of charge to the entire population through a network of 50 static and six mobile dispensaries, 72 maternal and child health clinics, 14 health offices and 10 static and two mobile dental clinics.

Dispensaries are each staffed by a nursing officer and an attendant, and the medical officer holds two to five sessions weekly. Their main function is to provide primary medical care, i.e. first aid, to injured persons, diagnosis and treatment of common ailments, and referral of serious cases to the hospitals.

Maternal and child health centres are staffed by midwives and family planning workers, and are regularly visited by the district nurse and the medical officer. Their activities are oriented towards health promotion, and protection of the vulnerable groups such as pregnant mothers and pre-school children. They provide ante-natal, post-natal and child care. All infants are immunized against tuberculosis, smallpox, diptheria, pertusis, tetanus and poliomyelitis. The family planning staff offer advice on fertility regulation methods and techniques.

Health offices are manned by a health inspector under the supervision of the sanitary authority of the region. They are responsible for environmental sanitation and hygiene, health education, school health services, control of communicable diseases and inspection of markets and other food premises.

The dental clinics are each staffed by a dental surgeon and a dental assistant, who attends to the requirements of children, expectant and nursing mothers and to all emergencies.

Because the services tend to be fragmented it is proposed to integrate them through the establishment of a network of health centres. Each of these centres will cover a population of about 20,000 within a radius of five miles, and will cater for all the basic health needs of the population they serve.

MAU 1 **CENTRAL SCHOOL OF NURSING**

Enquiries Principal Nurse Instructor-Tutor, Central School of Nursing, Candos.

Managing agency Ministry of Health

General details 1)From Jan & Jun 2)c.215 3)c.60

Courses

** NURSING
3-year certificate course for assistant nurses.
CSC with passes in 3 subjects, including English; age 18+.

** MIDWIFERY
18-month course in midwifery, leading to certificate, for district midwives.
As for Nursing course, above.

** NURSING
3-year certificate course in general nursing, leading to Registered nurse.
CSC with passes in 5 subjects, including English.

*** MIDWIFERY
1-year post-basic course in midwifery.
Qualified nurses.

(Continued)

*** PUBLIC HEALTH/WARD SISTER
3-month post-basic courses in public health home nursing, and for ward sister.
Qualified Registered nurses.

MAU 2 **MINISTRY OF HEALTH**

Enquiries Ministry of Health, Port Louis

Courses The following courses of training for nursing and paramedical personnel are run by the Ministry of Health (see also MRS 1)

** NURSING
2-year course for assistant nurse.
Preferably passes in 3 CSC subjects.

** MIDWIFERY
18-month course for district midwife, leading to certificate.
As for Assistant nurse course, above.

** DISPENSING
2-year certificate course for dispensing assistant.
CSC with pass in maths and credits in chemistry and another science, or equivalent.

** NURSING
3-year course in general nursing, leading to qualification of Registered Nurse.
CSC with passes in 5 subjects, including English.

** RADIOGRAPHY
3-year course in radiography, precise details of which are not currently available.

*** MIDWIFERY
1-year post-basic course in midwifery.
Registered Nurses.

MAU 3 **PHARMACEUTICAL LABORATORY, CANDOS**

Enquiries Senior Pharmacist, Victoria Hospital, Candos.

Managing agency Ministry of Health.

General details 1)From Jan 2)c.20 3)None

Courses ** PHARMACY
2-year course for dispensing assistant certificate.
CSC pass in maths and credits in chemistry and another science, or equivalent.

MAU 4 **UNIVERSITY OF MAURITIUS**

Enquiries Registrar, University of Mauritius, Reduit.

General details 1)Sep-Jul 2) 56 4)English 5)A few students from other countries have been accepted.

Courses

** MEDICAL LABORATORY TECHNOLOGY
4-year part-time Diploma course in medical laboratory technology.
GCE 'O' level or equivalent in English, French, maths and 2 science subjects.

** PUBLIC HEALTH
2-year full-time Diploma course in sanitary science; 3 years for Diploma in public health and works engineering.
GCE 'O' level or equivalent in 5 subjects including English, maths and 2 science subjects.

Note

The course in public health works and engineering is not run on a regular basis. The University also offers a course (9 months) in meat and other foods inspection.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Nauru

The Republic of Nauru is a small isolated island in the Central Pacific, with an area of 8.2 square miles. Its economy is based mainly on the phosphate mining industry.

There are two hospitals, one for the public, the other for employees of the Phosphate Corporation. Both provide general practice as well as in-patient care, backed by X-ray, laboratory and dispensary facilities. The public hospital has a dental clinic and provides public health, pest control and quarantine facilities. No charges are made for health care and there are no private practices or dispensaries.

There are no facilities for the training of medical personnel.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

New Zealand

Primary health care in New Zealand is centred on the country's 1650 general practitioners. The majority of these practise as solo practitioners but about 20 per cent practise in some form of group arrangement. Very few work from health centres or large group practises in which a full team approach to primary health care can be developed.

Almost all general practitioners work under a fee-for-service system although about 20 are paid a basic salary. A system of government subsidies exists and the doctor charges a fee in addition to the subsidy he receives for each service provided. The actual subsidy level varies and is higher for urgent services or nights or week-ends than it is for daytime services. It is also higher for children and pensioners than for other patients. An accident compensation scheme exists and in the case of accidents the patient pays no fee at all. Some other general practitioner services attract no private fee: the most important of these is the maternity service, but immunization services are also free.

The Government subsidises the salary of practice nurses working with general practitioners and over 600 nurses are employed in this manner.

There are some problems of mal-distribution of general practitioners; the areas considered to be under-doctored are mostly in poorer urban areas as a series of financial incentives available for rural practitioners helped solve the shortage of doctors that previously existed in rural area. Over all there is no major shortage of general practitioners. Since the output of the two medical schools is to increase considerably from 1981 onwards there may even be problems of an over-supply situation in a few years' time.

NZE 1 **CHRIST CHURCH TEACHERS' COLLEGE**

Enquiries: Principal, Christchurch Teachers' College, Christchurch. Tel: 790 480.

General details: 1)From Feb-Mar 3)Yes 4)English

Courses:

*** SPEECH THERAPY
3-year course for Certified Teacher with endorsement in Speech Therapy, comprising 1 year at any teachers college in New Zealand, followed by 2 years at the speech therapy department at Christchurch College.
University entrance - candidates accepted for general teacher training.

NZE 2 **DEPARTMENT OF HEALTH NURSING COURSES**

Enquiries: Department of Health: or direct to: Tutor-in-charge, School of Nursing, at one of the four locations - Wellington, Christchurch, Nelson, Auckland.

Note: Full-time basic nursing courses are established in four Schools of Nursing, as shown above. The general outline of available courses is listed below. For other advanced nursing courses see NZE 3 and NZE 15.

Courses:

** NURSING
1-year basic nursing programme, for Registered Nurse. This is available to students from countries which have no basic nursing programme of their own.
Entry to sixth form standard, or equivalent.

*** MIDWIFERY
6-month post-basic course in midwifery, for Registered Midwife.
Nurses holding registration as either a general and obstetric, or comprehensive, nurse.

*** NURSING
1-year (Feb-Nov) post-basic course in advanced nursing, designed to prepare nurses for positions of greater responsibility in any nursing situation. Options are nursing education (in hospital schools of nursing) or nursing services (in hospitals or the community, ie public health nursing). The course takes place at the School of Advanced Nursing Studies, in Wellington or Auckland.
Registered nurses with suitable record and experience.

NZE 3 **MASSEY UNIVERSITY**

Enquiries: Registrar, Massey University, Palmerston North.

General details: 1)From Mar in 3 terms 2) 3,000+ (all faculties) 3)Yes 4)English 5)Students from other countries are accepted.

Courses:

*** NURSING
3-year undergraduate diploma course in nursing studies.
University entrance level, with pass in prerequisite papers as determined by university.

*** FIRST DEGREES
Bachelor degree courses include BA with major in nursing studies; food technology (4 years).
University entrance (Higher School Certificate) level. Candidates for nursing should be registered nurses.

NZE 4 **NATIONAL RADIATION LABORATORY**

Enquiries: Director, National Radiation Laboratory, Christchurch.

Courses:

*** RADIATION PROTECTION
The Laboratory organizes programmes of training for radiation protection officers, precise details of which are not currently available.

NZE 5 **NEW ZEALAND MEDICAL RECORDS OFFICERS' ASSOCIATION**

(See also NZE 9)

Courses:

** MEDICAL RECORDS
Courses in medical records are organized by the Association on an in-service basis. There are three levels: preliminary - 1 year; intermediate - minimum of 1 year; and fellowships - minimum of 1 year.
Entry qualification not fixed, and depends on candidates suitability for the level of course chosen.

NZE 6 **OTAGO POLYTECHNIC**

Enquiries: Principal, Otago Polytechnic, Private Bag, Dunedin. Tel: 773 014.

General details: 1)Feb-Nov 2) 5,500 (total) 3)No 4)English 5)Students from other countries are accepted.

Courses

*** PHYSIOTHERAPY
3-year course in physiotherapy, for Registered Physiotherapists.
University entrance (Higher School Certificate) level, with certain subject requirements.

Note

A similar course is also run at the Schools of Physiotherapy, Auckland and Dunedin, and at Auckland Technical Institute.

NZE 7 **SCHOOL OF DENTAL NURSING, WELLINGTON**

Enquiries

Registrar, School of Dental Nursing, Willis Street, Wellington.

General details

2) 400 3)Some 4)English 5)Students from other countries are accepted, about 6 p.a. on basic course, and 4 p.a. on post-basic course.

Courses

** DENTAL NURSING
2-year course in basic dental nursing (dental auxiliary training). (See Note).
Minimum 4 years secondary education, age 17-25.

*** DENTAL NURSING
9-month post-basic course of tutor sister training in dental nursing.
Qualified dental nurses.

Note

The basic course is also run at the School of Dental Nursing in Auckland (Edenvale Road, Mt Eden 3) and at the School of Dental Nursing, Christchurch.

NZE 8 **TECHNICAL CORRESPONDENCE INSTITUTE**

Enquiries

Secretary, Technical Correspondence Institute, Box 30-355, Lower Nutt.

General details

2) 23,500 5)Students from other countries are accepted (see Note).

Courses

*** AIR POLLUTION CONTROL
1-year technical correspondence course for the diploma for air pollution control (Royal Society of Health, London). Students from overseas will be required to come to New Zealand for block course of approximately 4 weeks.
University entrance level.

*** HEALTH ENGINEERING
Minimum of 3 years study by correspondence through the institute, leading to diploma for health engineering (Royal Society of Health, London).
University entrance level.

*** DISPENSING
18-month correspondence course in pharmacy, leading to certificate of dispensary assistant, for dispensary assistants in training.
Candidates employed as dispensary assistants, who are seeking qualification.

Note

The Institute organizes correspondence courses for the NZ Trades Certification Board's exams, which are also taken by students prepared at technical institutes.

The Technical Correspondence Institute has some 1,500 overseas resident students, many officially sponsored by governments of Fiji, Tonga, Western Samoa, Cook Islands, and Tokelau Islands.

NZE 9-12 **TECHNICAL INSTITUTES**

Enquiries

Department of Education (Technical Division), Education House, Willis Street, Wellington 1; or to Principal of individual institute.

Note

Technical education in New Zealand is provided through fourteen technical institutes, a community college, and technical departments in six secondary schools. Some of these offer courses of training for paramedical personnel: in all, about 1,190 students annually take medical/paramedical courses at technical institutes.
Some of the courses available are listed below (a-k), and following this list are the names of institutions where some of the courses take place. (See also NZE 6 and NZE 8).

(a) ** CARDIOPULMONARY TECHNOLOGY
2-year course, including some in-service training, for NZCS (New Zealand Certificate in Science) (paramedical) in cardiopulmonary technology.
School Certificate in at least 2 relevant subjects.

(b) ** CARDIOTHORACIC TECHNOLOGY
3-year course with concurrent laboratory experience for NZCS with various options, including physiology (for cardiothoracic technology).
As for Cardiopulmonary technology course, above.

(c) ** DENTAL TECHNOLOGY
4-year part-time course in dental technology.
NZ School Certificate or equivalent.

(d) ** HEALTH SERVICE RECEPTION/MEDICAL RECORDS
1-year certificate course for health service receptionist, and in medical records.
NZ School Certificate in 4 subjects.

(e) ** ORTHOTICS, PROSTHETICS AND SURGICAL FOOTWEAR
3-year certificate course in orthotics (surgical appliances), prosthetics (artificial limbs) and surgical footwear.
School Certificate.

(f) *** CHIROPODY
3-year diploma course in chiropody.
University entrance (Higher School Certificate) level.

(g) *** MEDICAL TECHNOLOGY
3-year course, part-time with concurrent laboratory experience, followed by 2 years full-time in hospital, leading to Medical Technologists Certificate of Proficiency.
Minimum entry qualification is university entrance.

(h) *** OCCUPATIONAL THERAPY
3-year diploma course in occupational therapy.
University entrance.

(i) *** PHARMACY
3-year diploma course in pharmacy, including 52 weeks practical as sole pupil of pharmacist, and leading to registration.
University entrance.

(j) *** THERAPEUTIC RADIOGRAPHY
3-year diploma course in therapeutic radiography, comprising basic training in application sciences followed by specialization and practical training in approved hospitals.
University entrance.

(k) *** HEALTH INSPECTION
2½-year diploma course for health inspector (Royal Society of Health, London), comprising one year in district completing preliminary study, one academic year, and 6 months practical training.
University entrance.

NZE 9 **CENTRAL INSTITUTE OF TECHNOLOGY, PRIVATE BAG, TRENTHAM CAMP P.O.**

Courses (c), (e), (f), (g), (i), (j).

*** FIRST DEGREES
Bachelor degree courses include: 4 years for home science, with option in dietetics, for medical science, for nutrition, and for pharmacy; 5 years for dental surgery; 6 years for medicine and surgery. (see Note).
University entrance (Higher School Certificate) level, with certain subject requirements depending on course taken.

**** MASTER'S LEVEL
1-year master's degree courses in medical science, in human nutrition or home science, and in pharmacy; 2-year master's course in dental surgery.
Bachelor degree in field of study; candidates for MDS are not normally admitted until 2 years' after graduation.

**** POSTGRADUATE DIPLOMAS
Various postgraduate diploma courses include: clinical dentistry (6 months); obstetrics (6 months+); clinical pharmacology, dental public health, industrial health, microbiology, human nutrition, public health (all 1 year); clinical psychiatry (2 years); clinical pathology (2½ years); diagnostic radiology and psychological medicine (3 years).
Minimum qualification relevant first degree, with certain additional regulations, for example: candidates for obstetrics diploma must be minimum 1 year qualified from Otago University, and 5 years qualified from Fiji School of Medicine or Papua Medical College, and hold residential appointment in the field; candidates for clinical dentistry must be 4 years qualified; candidates for child psychiatry must have 1 year general psychology experience; candidates for psychological medicine and diagnostic radiology must hold full time appointment in respective department at Otago University.

**** DOCTORAL STUDIES
Doctor of Dental Science by thesis, and possibly oral or written exam in field of thesis, at least 5 years after first degree.

Note — The MB.ChB course is not available to overseas students except from Fiji and Western Samoa, who compete for two Polynesian places. All overseas students seeking initial entry to bachelor of dental surgery course must apply to the Overseas Students Admissions Committee, P.O. Box 12-348, Wellington North, by 1 July preceding course commencement. Overseas students who have attended a university overseas must apply for admission to the Registrar of the University of Otago and supply a copy of academic record. Applications must reach the Registrar by 1 October. Applications for the diploma in dental health must reach Registrar by 31 October and those for clinical dentistry by 30 June in the year preceding course commencement. Late applications are not considered.

NZE 10 — **PETONE TECHNICAL INSTITUTE, BOX 37-111, PETONE**

Courses — (d).

NZE 11 — **THE POLYTECHNIC, PRIVATE BAG, WELLINGTON**

Courses — (k).

NZE 12 — **VARIOUS TECHNICAL INSTITUTES**

Courses — (a), (b), (g), (h).

NZE 13 **UNIVERSITY OF AUCKLAND**

Enquiries: Registrar, University of Auckland, Private Bag, Auckland 1.
Tel: 74-740.

General details: 1)Feb-Oct 2) 10,519 3)Yes 4)English 5)Students from other countries are accepted, mainly from Pacific area.

Courses:

*** OPTOMETRY
4-year undergraduate diploma course in optometry.
University entrance (Higher School Certificate level).

*** FIRST DEGREES
6 years for bachelor degree in medicine and surgery (MB.ChB).
University entrance (Higher School Certificate) with biology and chemistry.

**** MASTER'S LEVEL
3 terms for master of medical science; 2 years for MA (social welfare and development).
For MMedSc, a BMedSc degree is necessary; for MA (social welfare and development) a BA majoring in the social sciences.

**** POSTGRADUATE DIPLOMAS
Postgraduate diploma courses include: obstetrics (6 months); paediatrics (1 year); gynaecology & obstetrics (2 years); clinical psychology and psychiatry (both 3 years).
Relevant first degree. For DipG&O candidates must be 4 years qualified or 6 years from Fiji School of Medicine, and must hold DipObst. For paediatrics, candidates must be 3 years qualified; similarly for psychiatry, with 1 year approved hospital service.

**** DOCTORAL STUDIES
Research appointments are available at the National Women's Hospital for science or medical graduates who wish to undertake research in biochemistry, endocrinology or the scientific background of obstetrics gynaecology and neonatal paediatrics, and leading to PhD in obstetrics.

NZE 14 **UNIVERSITY OF OTAGO**

Enquiries: Registrar, University of Otago, P.O. Box 56, Dunedin.

General details: 1)Mar-Nov 2) 6,675 3)Yes 4)English 5)Students from other countries are accepted. (see Note).

Courses:

*** HOME SCIENCE/DIETETICS
3-year undergraduate diploma course in home science with option in food service administration for those wishing to train as dietitians.
University entrance level qualification.

NZE 15 **VICTORIA UNIVERSITY OF WELLINGTON**

Enquiries: Registrar, Victoria University of Wellington, Private Bag, Wellington 1.
Tel: 721-000.

General details: 1)Mar-Oct 2) 6,874 4)English

Courses:

*** NURSING
Bachelor degree course for BA with major in nursing studies.
Registered nurse/university entrance plus pass in prerequisite papers as determined by university.

Nigeria

The planning and provision of medical and health services in Nigeria are the responsibilities of the Federal and State Governments and the local authorities. These include the provision of hospitals, health centres mainly for out-patients, maternity and child welfare clinics, mental homes, infectious diseases hospitals and treatment centres.

Each of the 19 States of the Federation has a Ministry of Health which is directly in charge of medical and health services and is also responsible for the training of personnel in various State-owned health institutions. In addition to government hospitals, there are many hospitals, clinics, dental centres, eye clinics and other health institutions run by missions, commercial firms and private doctors.

Primary health care in Nigeria is delivered by means of static and mobile units. The static units are the health centres, which are normally the patients' first point of contact. Health centres have facilities for out-patients and some in-patients. Treatment is provided for general medicine, some surgery, paediatrics, obstetrics and gynaecology. Mobile clinics operate mainly in the rural areas but also on the outskirts of the cities. Only minor cases receive treatment, more serious cases being referred to the health centres.

Cases for which treatment is not available in the health centres are referred to the general hospitals, managed by the State governments or to the teaching hospitals which are the responsibility of the Federal Government.

Under the Third Development Plan for Nigeria, 1975-80, specific health policies and objectives were formulated with the object of providing more effective health care and services to the nation's population. These are in the following areas: health manpower development and deployment, the development and expansion of hospital services, the provision of a comprehensive health coverage, the control of diseases, the improvement of the management and utilization of health institutions, the expansion of medical research, and the establishment of a planning and research unit to collect, process and publish data on major health problems.

Priority is being given to the development and expansion of relevant training institutions to ensure an adequate supply of the needed categories of health manpower and their even distribution in the country. In recognition of the strategic role of doctors in the health system and of the shortage of doctors in many parts of the country, the expansion of medical colleges and the associated facilities for clinical training is being undertaken. The objective was to achieve an admission level of 3,000 for the whole system by 1980. As a related policy, a combination of incentive measures is being introduced to bring about a more even distribution of doctors. Supplementary to these policies, upgrading programmes are being introduced to train medical personnel to perform ordinary medical duties in hospitals and health centres so as to relieve the overburdened doctors. Training programmes for other para-medical personnel are also being expanded.

In regard to the development and expansion of hospital services, a major feature of the plan is the establishment by the Federal Ministry of Health of a teaching hospital in each state. The States' policies are designed to provide improved curative faciltiies in the State capitals and divisional headquarters to meet the needs of the population centres.

The focus of the policy on health coverage is on the introduction of comprehensive health centres with facilities for the delivery of both curative and preventive health services. The aim was to increase the cover to a minimum of 40 per cent of the population, from the estimated coverage of 25 per cent in 1975.

The Federal Government has taken the lead in the introduction of the national malaria control programme; vehicles, drugs and equipment having been provided to help the States to organize their programmes.

NIG 1 **AFRICAN REGIONAL HEALTH EDUCATION CENTRE (ARHEC)**

Enquiries

Director, African Regional Health Education Centre, Department of Preventive and Social Medicine, Faculty of Medicine, University of Ibadan, Ibadan.

General details

1)From Sep 2) 40 3)Yes 4)English 5)About 30 per cent of annual admission is from English-speaking African countries such as Liberia, Sierra Leone, Ghana, Kenya, Tanzania, Uganda, Zambia, Swaziland, Botswana, Cameroon.

Courses

*** HEALTH EDUCATION
1-year course for Advanced Diploma in Health Education, to prepare specialist health educators to undertake the planning, conducting and evaluating of health programmes for health and allied personnel and for school teachers, and of simple studies related to overt and covert health behaviour. (See Note.)
Non-graduate with basic qualification in health sciences, education or social sciences who have satisfied the University that previous education and experience in health or education qualify them for the course (5 years experience on the job is minimum requirement).

**** PUBLIC HEALTH
2 years with dissertation for Master of Public Health (Health Educ.), to prepare key personnel in health education units, training institutions, and for research projects in ministries of health, education or welfare as well as in professional organizations and voluntary agencies.
Doctoral, master's or bachelor's degree in education, sociology, nursing, biology, health sciences, anthropology or any other related fields of study acceptable to senate; or MBBS. Minimum of two years post qualification experience in the field.

Note

The non-graduate advanced diploma course gives an opportunity to personnel trained some years ago - often abroad - to update their knowledge and improve their present status; thus it is anticipated that it will be phased out within a few years, as the need diminishes.

The Institution enjoys the collaboration of the Federal Republic of Nigeria and the WHO African region.

See also NIG 43.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

NIG 2 **AHMADU BELLO UNIVERSITY, INSTITUTE OF HEALTH**

Enquiries — Director, Institute of Health Ahmadu Bello University, P.M.B. 1008, Samaru, Zaria. Tel: 2097 or 2098; telegram: Abuhealth Zaria

Managing agency — Federal Ministry of Health

General details — 1)Sep-Jul 2) 1081 3) 449m & 197F 4)English 5)Students from other countries have been accepted

Courses

* MEDICAL EQUIPMENT TECHNOLOGY
2-year certificate course for medical equipment attendant, to provide training for medical equipment technicians. This is in-service training at ABU Hospital, Zaria.
Primary VII.

* MEDICAL RECORDS
12-month course leading to preliminary medical records certificate issued by the Institute, to train staff for junior level manpower in medical and health records.
Primary VII, with 2 years' working experience in medical records.

* PUBLIC HEALTH
2-year certificate course for health assistant, to provide junior health staff.
Primary VII.

** MEDICAL LABORATORY TECHNOLOGY
4-year course for medical laboratory technologist, leading to IMLT certificate.
WASC with 5 credits, 3 in science subjects.

** MEDICAL RECORDS
18-month course for the intermediate medical records certificate, to train medical records supervisors for medical and health establishments.
WASC with credits in English, maths and a science subject.

** NURSING
3-year course in general nursing, for Nigeria Registered Nurse.
WASC.

** PUBLIC HEALTH
3-year course for health superintendent, leading to Diploma in Public Health.
WASC.

*** MIDWIFERY
1-year post-basic course in midwifery, for Nigeria Registered Midwife.
Nigeria Registered Nurse certificate.

**** MEDICINE
2-year postgraduate training for FNMC, to provide hospital consultancy medical staff.
MBBS plus at least two years' post-registration working experience.

Note — Most courses at the Institute are run in conjunction with other institutions, ie, ABU School of Midwifery, Kaduna, ABU School of Nursing, Zaria, School of Hygiene, Kano, and ABU Hospitals in Kaduna and Zaria.

NIG 3 **FEDERAL SCHOOL OF RADIOGRAPHY, LAGOS**

Enquiries — Principal, Federal School of Radiography, 2-4 Taylor Drive, Medical Compound, P.M.B. 1068, Yaba, Lagos.

Manging agency — Federal Ministry of Health

Nigeria

General details 1)From Oct 2) 71 3)None (but being planned) 4)English 5)Five students a year are accepted e.g. from Zimbabwe, Ghana, Cameroon, or Gambia.

Courses

*** MEDICAL RADIOGRPAHY (DIAGNOSTIC)
3-year course in medical radiography with proficiency in diagnostic aspect only, leading to diploma of College of Radiographers, London (DCR), and Federal School of Radiography certificate.
GCE in 5 subjects including 2 at 'A' level. Subjects must include: English language, maths, two science subjects - preferably physics and chemistry; age at least 18 years and medically fit.

NIG 4 LAGOS UNIVERSITY TEACHING HOSPITAL

Enquiries Director of Administration, Lagos University Teaching Hospital, P.M.B. 12003, Surulere. Tel: 841451 (20 lines).

Managing agency Federal Ministry of Health & Social Welfare.

General details 1)Varies 2) 500 3) 400f & 2m 4)English 5)A maximum of 10 students are accepted annually from countries such as Cameroon, Kenya, Ghana.

Courses

* HOSPITAL AIDE
4-month certificate course for hospital aide, in-service to provide practical and theoretical training of wardmaids to assist in nursing care duties.
First School Leaving Certificate (Primary VI).

** DENTAL ASSISTANT
2-year course of training up to professional certificate level for dental surgery assistant.
WASC or GCE 'O' level, English and biology essential.

** MEDICAL LABORATORY TECHNOLOGY
4-year course of training up to professional diploma of the Institute of Medical Laboratory Technology.
WASC or GCE 'O' level with 5 credits, including English, maths, chemistry, physics or biology.

** MEDICAL RECORDS
18-month course of training up to professional certificate of Nigerian Association of Medical Records Officers (NAMRO), to provide medical record assistant.
WASC or GCE 'O' level with credits in English and maths; some previous experience an advantage.

** NURSING
3½-year training in general nursing, leading to hospital certificate, registrable with Nursing Council of Nigeria.
WASC or GCE 'O' level with 5 credits, including English, biology or health science; admission through competititve exam (male and female).

*** MIDWIFERY
1-year course of training up to professional level in midwifery, registrable with Midwifery Board of Nigeria.
Registered nurses with at least 1 year post-qualification experience.

*** OPERATING THEATRE TECHNIQUES
1-year course in operating theatre techniques, leading to hospital certificate.
Registered nurses/midwives with at least 1 year post-qualification experience.

**** MEDICAL SPECIALITIES
4-5 years postgraduate medical training for doctors (residency programme), leading to award of Fellowship Certificate of the Nigerian Medical Council in different disciplines.
MBBS or equivalent. Candidates must have served in the National Youth Service Corps, and some specialities require candidates to have held at least 1 year post-registration senior house officer appointment in chosen discipline.

Note — See also NIG 47.

NIG 5 - 23 NURSING AND MIDWIFERY TRAINING

Enquiries — Secretary/Registrar, Nursing and Midwifery Council of Nigeria, P.M.B. 1194, Ikeja, Lagos.

There are 16 fully approved and 25 provisionally approved Schools of Nursing, 56 approved Schools of Midwifery, 10 approved Community Midwifery Schools and 4 provisionally approved Schools of Psychiatric Nursing. Schools of University Teaching Hospitals are managed by the Federal Government; other schools are managed either by the State Governments or by Missionary Societies, denoted (M) on the list below.

Courses

(a) * MIDWIFERY
3-year certificate course in midwifery for Registered Midwife (RM) at the schools of Midwifery listed below. (Note: this 3-year course is being phased out in favour of the 1-year course for Registered Nurses, described below.)
First School leaving certificate. Students follow an introductory course for the first year, reduced to 6 months for those with full secondary education.

(b) ** COMMUNITY MIDWIFERY
3-year certificate course in community midwifery for the qualification of Registered Community Midwife (RCM) at the Schools of Community Midwifery listed below.
Examination of the Test Educational Research Unit (West Africa); West African School Certificate.

(c) ** NURSING
3-year certificate course in general nursing for Registered Nurse (RN) at the Schools of Nursing listed below.
Examination of Test Educational Research Unit (West Africa); West African School Certificate.

(d) *** MIDWIFERY
1-year certificate course in midwifery for Registered Midwife (Note: this course is being preferred to the 3-year course described above.)
Registered Nurse.

(e) *** PSYCHIATRIC NURSING
1-year certificate course in psychiatric nursing for Registered Psychiatric Nurse (RPN) at the Schools of Psychiatric Nursing listed below.
Registered Nurse.

(f) *** PUBLIC HEALTH NURSING
1-year certificate course in public health nursing for Registered Public Health Nurse (RPHN).
Registered Nurse/Registered Nurse Midwife.

Note — For advanced nursing courses see NIG 24, NIG 43, NIG 44, NIG 49.

NIG 5 **Schools of Nursing and Midwifery, Anambra State**

Course (a) or (d)	Awgu Joint Hospital, Awgu; Bishop Shanahan Hospital, Nsukka (M); Holy Rosary Maternity Hospital, Onitsha (M); St Joseph's Hospital, Adazi, Via Awka (M).
Course (a)/(d) & (c)	Iyi-Enu Hospital, Onitsha; Our Lady of Lourdes Hospital, Ihiala (M); University of Nigeria Teaching Hospital, Enugu.
Course (e)	Psychiatric Hospital, Uwani, Enugu.

NIG 6 **Schools of Nursing and Midwifery, Bauchi State**

Course (c)	General Hospital, Bauchi.
Course (b)	Community Midwives Training School, Bauchi.

NIG 7 **Schools of Nursing and Midwifery, Bendel State**

Course (a) or (d)	St Camillus Hospital, Uromi (M); St Philomena's Maternaity Hospital, Benin City; Zuma Memorial Hospital, Irrua, Ishan.
Course (c)	Baptist Hospital, Eku; General Hospital, Warri.
Course (a)/(d) & (c)	Specialist Hospital, Benin City; University of Benin Teaching Hospital, Benin City.
Course (b)	School of Health Technology, P.M.B. 1123, Benin City.
Course (e)	Neuro Psychiatric Hospital, Uselu, Benin City.

NIG 8 **Schools of Nursing and Midwifery, Benue State**

Course (a) or (d)	Mkar Christian Hospital, Mkar, via Gboko (M).
Course (b) & (c)	General Hospital, Makurdi.

NIG 9 **Schools of Nursing and Midwifery, Borno State**

Course (a)/(d) & (c)	General Hospital, Maiduguri.

NIG 10 **Schools of Nursing and Midwifery, Cross Rover State**

Course (a) or (d)	General Hospital, Iquita-Oron; Methodist Hospital, Ituk-Mbang (m); Maternity Hospital, Calabar; Maternity Hospital, Moniaya, Ogoja; Qua-Iboe Church Hospital, Etinan (M); St Mary's Hospital, Urua-Akpan, Ikot-Ekpene.
Course (c)	General Hospital, Calabar.
Course (a)/(d) & (c)	St. Luke's Hospital, Anua-Uyo (M).
Course (b)	School of Health Technology, Calabar.

NIG 11 **Schools of Nursing and Midwifery, Gongola State**

Course (a)/(d) & (c)	School of Nursing and Midwifery, Yola.

NIG 12 **Schools of Nursing and Midwifery, Imo State**

Course (a) or (d) Akahaba-Abiriba Joint Hospital, Abiriba; General Hospital, Aboh-Mbaise; Methodist Hospital, Amachara, Umuahia (M); Ramat Specialist Hospital, Umuahia.
Course (c) Queen Elizabeth Hospital, Umuahia.
Course (a)/(d) & (c) General Hospital, Aba; Holy Rosary Hospital, Emekuku; Owerri (M); Mater Misericordiae Hospital, Afikpo (M).
Course (b) School of Health Technology, Aba (see also NIG 27).

NIG 13 **Schools of Nursing and Midwifery, Kaduna State**

Course (a) or (d) Ahmadu Bello University Hospital, Kaduna (see also NIG 2); General Hospital, Kafanchan; St Gerard's Catholic Hospital, Kakuri, Kaduna (M).
Course (c) Institute of Health, Ahmadu Bello University, Zaria (see also NIG 2).
Course (a)/(d) & (c) General Hospital, Katsina; Wusasa Hospital, Zaria.
Course (d) Community Midwifery Training School, P.M.B. 2123, Kaduna; Community Midwifery Training School, Zonkwa.
Course (e) Psychiatric Hospital, Kaduna.

NIG 14 **Schools of Nursing and Midwifery, Kano State**

Course (a) or (d) Murtala Muhammed Hospital, Kano.
Course (c) City Hospital, Kano; Dambatta Hospital.

NIG 15 **Schools of Nursing and Midwifery, Kwara State**

Course (a) or (d) Maternity Hospital, Ilorin.
Course (c) General Hospital, Ilorin.
Course (b) SIM Hospital, Egbe, via Ilorin.

NIG 16 **Schools of Nursing and Midwifery, Lagos State**

Course (a) or (d) School of Midwifery, Awolowo Road, Ikoyi, Lagos.
Course (c) School of Nursing, 63 Campbell Street, Lagos; Nigerian Army School of Nursing, Victoria Island, Lagos.
Course (a)/(d) & (c) Lagos University Teaching Hospital, Lagos (see also NIG 4).
Course (b) Ikeja General Hospital, Lagos.

NIG 17 **Schools of Nursing and Midwifery, Niger State**

Course (a)/(d) & (c) General Hospital, Bida.

NIG 18 **Schools of Nursing and Midwifery, Ogun State**

Course (a) or (d) Oba Ademola II Maternity Hospital, Abeokuta, Sacred Heart Hospital, Abeokuta (M).
Course (c) Specialist Hospital, Abeokuta.

Course (a)/(d) & (c)	State Hospital, Ijebu-Ode Ijebu-Ife.
Course (e)	Aro Psychiatric Hospital, Abeokuta.
Course (f)	School of Health Technology, Ijebu-Ode (see also NIG 33).

NIG 19 **Schools of Nursing and Midwifery, Ondo State**

Course (a) or (d)	Ile Abiye Hospital, Ado-Ekiti; General Hospital, Akure; Maria Assumpta Hospital, Ado-Ekiti (M); St Louis Hospital, Owo.
Course (c)	State Hospital, Ado-Ekiti; State Hospital, Akure.

NIG 20 **Schools of Nursing and Midwifery, Oyo State**

Course (a) or (d)	Catholic Hospital, Oke-Offa, Ibadan (M).
Course (c)	Seventh Day Adventist Hospital, Ile-Ife (M); State Hospital, Oshogbo.
Course (a)/(d) & (c)	Adeoya State Hospital, Ibadan; Department of Nursing, University of Ife (see also NIG 44); University College Hospital, Ibadan; Wesley Guild Hospital, Ilesha (M).
Course (b)	School of Health Technology, Eleiyele, Ibadan (M).

NIG 21 **Schools of Nursing and Midwifery, Plateau State**

Course (a) or (d)	General Hospital, Vom, via Jos; Maternity Hospital, Jos; Murtala Muhammed Hospital, Jos.
Course (c)	General Hospital, Jos; Vom Christian Hospital, Vom, via Jos.

NIG 22 **Schools of Nursing and Midwifery, Rivers State**

Course (a)/(d) & (c)	General Hospital, Port Harcourt.

NIG 23 **Schools of Nursing and Midwifery, Sokoto State**

Course (a)/(d) & (c)	General Hospital, Sokoto.

NIG 24 **NURSING TEACHING PROGRAMMES**

Enquiries	Officer-in-Charge, Nurse Tutor Programme, Federal Ministry of Health, Broad Street, Lagos.
Managing agency	Federal Ministry of Health jointly with Federal Ministry of Education.
General details	1)Not known 2) 36 4)English 5)Students have been accepted from West Indies, Ghana and USA.
Courses	*** NURSE TUTOR 1-year certificate course to train general nurse tutors for schools of nursing. *Registered nurses or registered midwives with at least 2 years practical experience in speciality (general) nursing.*

*** PUBLIC HEALTH NURSE TUTOR
1-year certificate course to train public health nurse tutors for public health schools of nursing.
Registered nurses or registered midwives with at least 2 years practical experience in speciality (public health) nursing.

*** MIDWIFERY NURSE TUTOR
1-year certificate course to train midwifery nurse tutors for schools of midwifery.
Registered nurses/midwives with at least 2 years experience in speciality (midwifery) nursing.

*** PSYCHIATRIC NURSE TUTOR
1-year certificate course to train psychiatric nurse tutors for psychiatric schools of nursing.
Registered nurse/psychiatric nurse with at least two years experience in speciality (psychiatric) nursing.

Note — The above courses are based at the National Technical Teachers' Training College, Lagos, at the Colleges of Technology, Enugu and Kaduna, and at University College Hospital, Ibadan.

NIG 25-39 PARAMEDICAL TRAINING COURSES

Enquiries — Federal Ministry of Health, Broad Street, Lagos. Or to Principal of individual institutions.

Courses — Courses for paramedical/auxiliary personnel in the health services are organized in a number of institutions throughout the states of Nigeria. The language of instruction is English and non-national students have been accepted in some of the institutions, and are likely to be acceptable in others. An outline of courses available is given below (a-n). It is followed by a list of individual institutions with an indication of which courses are available at each. The list of institutions is arranged under states, but it is not comprehensive.

(a) * COMMUNITY HEALTH
1-year course for community health aide, to assist the community health assistant and to train primary health care workers.
Standard 6 with or without previous experience as rural health promoter, etc.

(b) * COMMUNITY HEALTH
2-year course for community health assistant, leading to national Diploma or Community Health assistant.
Grade 4, with or without previous experience as dispensary assistant, etc.

(c) * DENTAL HEALTH
2-year course for dental health assistant.
Grade 4, preferably with school certificate pass in 1 or 2 sciences.

(d) * LABORATORY TECHNOLOGY
2-year certificate course for laboratory assistant, to provide hospital staff.
Primary 7 certificate, age about 18 years.

(e) * LEPROSY CARE
3-month course, leading to certificate, for leprosy attendant, to provide staff for leprosy clinics.
Primary 7, any age.

(f) * MEDICAL RECORDS
18-month course for medical records assistant.
As for Dental health course, above.

(g) * PHARMACY/DISPENSING
2-year course for pharmacy/dispensing assistant, covering simple art of dispensing, weighing, measuring and storekeeping, pharmaceutical terms and principles of drug action, preparation of simple drugs, interpretation of prescriptions and management of patients.
As for Dental health course, above.

(h) * PUBLIC HEALTH/ENVIRONMENTAL SANITATION
2-year course for public health assistant, to help public health inspectors, and leading to diploma/certificate.
At least 4 years secondary education.

(i) * RURAL HEALTH
2-year course for rural health assistant, to provide staff for rural health services. (In certain institutions the duration of course is 18-20 months.)
Grade 4.

(j) * VACCINATION
6-month course in vaccination procedures, to train people for the national expanded immunization programme.
Grade 4.

(k) ** LABORATORY TECHNOLOGY
2-year certificate course for student laboratory technologist, leading to IMLT of Nigeria certificate.
WASC grade 1 or 2 with 5 credits in relevant subjects.

(l) ** LEPROSY CARE
6-month course for assistant leprosy inspector certificate.
Rural health assistant certificate, or leprosy attendant certificate, with 3-5 years experience.

(m) ** MEDICAL LABORATORY TECHNOLOGY
4-year course in medical laboratory technology, leading to diploma of the IMLT of Nigeria.
GCE or MASC with English, maths, chemistry, biology or physics, and one other subject.

(n) ** PUBLIC HEALTH/ENVIRONMENTAL SANITATION
3-year course for public health inspector/health superintendent, leading to diploma of Royal Society of Health, London.
School certificate with pass in English and at least one science subject.

NIG 25 **School of Medical Laboratory Technology, University of Benin Teaching Hospital, Benin City (Benin)**
Courses (m)

NIG 26 **School of Medical Laboratory Technology, St Luke's Hospital, Anua, Uyo (Cross River)**
Courses (d), (k)

NIG 27 **School of Health Technology, Aba (Imo)**
Courses (a), (i) 18 month course. (See also NIG 12.)

NIG 28 **Medical Auxiliaries Training School, P.M.B. Kaduna (Kaduna)**
Courses (e), (i), (l) (Course (i) is likely to be replaced by (a) and (b) in the future).

NIG 29 **Clinical Assistant Training School, B/Kudu (Kano)**
Training for Sanitary assistant, details not currently available.

NIG 30 **School of Health Technology, Hadejia (Kano)**
Training in Health technology, details not currently available.

NIG 31	**School of Health Technology, Club Road, P.M.B. 3066, Kano (Kano)**
Courses	(a), (b), (d), (f), (i).
NIG 32	**School of Health Technology, 8 Harvey Road, Yaba (Lagos)**
Courses	(a), (b), (h), (n).
NIG 33	**School of Health Technology, P.M.B. 2081, Ijebu-Ode (Ogun)**
Courses	(g), (i), (n). (See also NIG 18.)
NIG 34	**School of Health Technology, P.M.B. 791, Akure (Ondo)**
Courses	(b), (c), (d), (f), (g), (n).
NIG 35	**School of Medical Laboratory Technology, University College Hospital, Ibadan (Oyo)**
Courses	(m).
NIG 36	**School of Hygiene, P.M.B. 5172, Eleiyale, Ibadan (Oyo)**
Courses	(a), (b)
NIG 37	**Christian School of Health Technology, c/o Mkar Christain Hospital, P.O. Box 261, Jos (Plateau)**
Courses	(i) 20 month course
NIG 38	**School of Health Technology, P.M.B. 5039, Port Harcourt (Rivers)**
Courses	(a), (b), (h), (j), (n)
NIG 39	**Medical Auxiliary Training School, P.M.B. 2155, Sokoto (Sokoto)**
Courses	(g), (i)
Note	For other paramedical courses see NIG 2, NIG 4, NIG 40. See also NIG 5-23 for nursing and midwifery.

NIG 40 SCHOOL OF MEDICAL LABORATORY SCIENCES, ENUGU

Enquiries: Principal, School of Medical Laboratory Sciences, University of Nigeria Teaching Hospital, Enugu.

Managing agency: Federal Ministry of Health

General details: 1)From Oct 2) 104 3) 2 (mixed) hostels 4)English 5) 2 students from Europe have been accepted in the current year.

Relevant departments: Chemical pathology - Microbiology - Haematology - Histology - Biochemistry - Microbiology - Physical chemistry - Physiology

Courses:

** MEDICAL LABORATORY SCIENCES
2 years for Diploma of IMLS, in two parts: Part IA comprising 6-month course in basic chemistry, biology, maths, statistics, physic and microbiology; Part IB comprising 18 months mixed practical/theoretical work in bacteriology, parasitology, histology and haematological techniques.
Pass at credit level in GCE/WASC with English language, physics, maths, biology and chemistry; entry to Part IB depends on pass in Part IA of the course.

*** MEDICAL LABORATORY SCIENCES
2 years for Associateship of the Nigerian Institute of Medical Laboratory Sciences in one of the following specializations: chemical pathology, haematology, histology, bacteriology, virology, parasitology. The course is in two parts: Part IIA comprising six months advanced general study in basic sciences; and Part IIB comprising 18 months in chosen specialization.
Possession of Part IB diploma; entry to Part IIB depends on pass in Part IIA of the course.

**** MEDICAL LABORATORY SCIENCES
2-year course leading to fellowship (FIMLS): candidates choose a second specialization from those listed for the Associateship above.
Possession of AIMLS in one subject.

NIG 41 **UNIVERSITY COLLEGE HOSPITAL, SCHOOL OF RADIOGRAPHY, IBADAN**

Enquiries — Principal, School of Radiography, University College Hospital, Ibadan.

Managing agency — Federal Ministry of Health

General details — 1)Sep-Dec, Jan-Apr, Apr-Jul 2) 71 3) 20 4)English 5)Two students are accepted annually from Ghana

Courses — *** RADIOGRAPHY
3-year course in radiography, leading to diploma of College of Radiography, London (See Note.)
GCE in 4 subjects of which one must be English and two must be at 'A' level.

Note — As well as University College Hospital, training takes place at the Abeoyo Government Hospital, the Chest Clinic and the Dental Clinic, all in Ibadan.
Since the entry requirements have been raised to two 'A' levels the intake has dropped, and it may be necessary to start a Nigerian-based training in the near future.

NIG 42 **UNIVERSITY OF BENIN**

Enquiries — Registrar, University of Benin, P.M.B. 1154, Benin City. Tel: 343; telegram: Uniben, Benin City

General details — 1)Oct-Jun in 3 terms 2)c.1,000 3) 32 student hostels 4)English

Relevant faculties — Medicine - Pharmacy - Science

Relevant departments — Anaesthesiology - Anatomy - Biochemistry - Child health - Community health - Dentistry - Medicine - Mental health - Obstetrics and gynaecology - Pathology - Pharmacy - Physiology - Radiology - Surgery

Courses — *** FIRST DEGREES
3-year courses in biochemistry and microbiology; 4 years in pharmacy; 5 years in medicine and surgery, and in dental surgery.
WASC/GCE 'A' level.

**** DIPLOMAS
1-year postgraduate diploma courses in anaesthetics, and in nursing administration.

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NIG 43 **UNIVERSITY OF IBADAN**

Enquiries — Dean, Faculty of Medicine, University of Ibadan; or to Medical School, University College Hospital, Ibadan. (See Note.)

Managing agency — Federal Ministry of Health

General details 1)From Sep 2) 1,422 3)Some 4)English 5)Students from other countries are accepted mainly from Commonwealth countries and America.

Relevant departments

Pre-clinical - Clinical - Physiotherapy - Nursing - Dentistry

Courses

*** FIRST DEGREES
First degree courses include 3 years for nursing and physiotherapy; 4 years for medical laboratory technology; 4-5 years for medical sciences; and five years for medicine and dentistry.
General admission requirements are GCE in 5 subjects with not less than 2 at 'A' level, or in 4 subjects with not less than 3 at 'A' level; or WASC with passes at credit standard and success at the University entrance examination. In all cases, there are certain subject requirements depending on course taken.

**** MASTER'S LEVEL
Master's degree courses - normally 2 years - are available in the following specializations: human nutrition, medicine, surgery, public health (health education).
Appropriate first degree - usually with post-qualification experience in the field.

**** VARIOUS
Postgraduate certificate and diploma courses include tropical health (3 months), public health (1 year), anaesthesia (1 year), immunology (16 weeks), food science and applied nutrition (8 months), nutrition (10 months), and health education (12 weeks).
Medical, or suitable science degree.

**** RESEARCH
Research facilities are available to suitably qualified graduates in the field of immunology, virology, child health, and rural health. The degree of doctor of medicine may be conferred on original contribution to the advancement of science, through published work.

Note

The University College Hospital, Ibadan (see also NIG 35 and NIG 41) is closely associated with the University on all matters affecting teaching and research. The Faculty of Medicine, University of Ibadan has also established a postgraduate programme in public health in the Department of Preventive and Social Medicine, thus becoming the first African Regional Health Education Centre for the Anglophone member countries of the WHO in Africa - see separate entry NIG 1.

NIG 44 UNIVERSITY OF IFE

Enquiries

Registrar, University of Ife, Ile Ife. Tel: 2290; telegram: Ifevarsity Ile Ife.

General details 1)Mid Sep-Mid Feb, End Feb - Mid Jul 2)c.900 3)Yes, for all clinical students 4)English 5)Students from other African countries are admitted, not more than 5 per cent of total per annum.

Relevant faculties

Health sciences - Pharmacy

Courses

** FIRST DEGREES
7-year first degree courses in medicine and in dentistry; 5 years for nursing; 4 years for medical rehabilitation (occupational therapy or physiotherapy), environmental health, and pharmacy.
Five 'O' level subjects, including specific subject requirements according to course taken, with success in competititve entrance exam and at interview.

**** MASTER'S LEVEL/DOCTORAL STUDIES
In each of the two faculties there are postgraduate programmes leading to MSc and PhD degrees.

Note — In addition to the degree of Bachelor of Nursing (BNSc) successful students of nursing are also awarded qualifications of Registered Nurse, Registered Midwife and Registered Public Health Nurse.

NIG 45 UNIVERSITY OF ILORIN

Enquiries — Dean, Faculty of Health Science, University of Ilorin, P.M.B. 1515, Ilorin.

General details — 1)Sep-Dec, Jan-Mar, Apr-Jun 2) 110 3)Yes 4)English 5)Students from other countries have been accepted.

Relevant departments — Medicine - Surgery - Maternal & child health - Pathological sciences - Epidemiology & health measurement - Behavioural sciences.

Courses — *** FIRST DEGREE
1 year premedical followed by 5 year programme for MBBS (Ilorin).
School Certificate with at least 5 credits including English and maths, and preferably also a credit in physics, with chemistry and biology at 'A' level.

Note — This is the only course offered at present, although other health training courses are being planned. First entrants for 5-year MBBS course began in October 1978.

NIG 46 UNIVERSITY OF JOS

Enquiries — Registrar, University of Jos, P.M.B. 2084, Jos. Tel: 3174; telegram: University Jos.

General details — 1)Oct-Jun in 3 terms 2)c.500 3)Yes 4)English 5)Students from other countries have been accepted.

Relevant faculty — Medical sciences.

Courses — *** FIRST DEGREES
6-year courses in medicine and surgery, and in dental surgery.
WASC/GCE 'A' level.

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NIG 47 UNIVERSITY OF LAGOS COLLEGE OF MEDICINE

Enquiries — Provost, College of Medicine, P.M.B. 12003, Lagos. Tel: 841451/1205; telegram: Unimed, Yaba, Lagos.

General details — 1)Oct-Jan, Feb-Jun 2) 952 3) 749m & 158f 4)English 5)About 47 students per year are accepted, mainly from Africa, Asia and the Caribbean.

Relevant departments — Anaesthesia - Anatomy - Biochemistry - Community health - Medicine - Microbiology & parasitology - Morbit anatomy - Obstetrics & gynaecology - Oral surgery & pathology - Paediatrics - Physiotherapy - Pharmacology - Physiology - Preventive dentistry - Radiation biology & radiotherapy - Radiodiagnosis - Restorative dentistry - Surgery. Biomedical Engineering Unit. Medical illustration Unit.

Courses

*** FIRST DEGREES
3 years for first degree in physiology and in physiotherapy; 5 years for medicine and for dentistry.
West African School Certificate/GCE, including 2 subjects at 'A' level for physiology and physiotherapy degree, and 3 at 'A' level for medicine and dentistry. Minimum age 17 years.

**** MASTER'S LEVEL
Courses leading to MD and to MS degrees.
Medical graduates with at least 4 years approved experience in medicine or surgery.

**** ANAESTHESIA
1-year postgraduate diploma course in anaesthesia, to provide advanced instruction in tropical medicine for postgraduate students of clinical medicine and related discipline.
Registered medical practitioners.

Note

The College, in collaboration with the Lagos University Teaching Hospital (see NIG 4), runs a number of postgraduate courses leading to the award of Fellowship of Nigeria Medical Council in various specialities.

NIG 48 UNIVERSITY OF NIGERIA

Enquiries

Registrar, University of Nigeria, Nsukka, Anambra State. Tel: Nsukka 6251; telegram: Nigersity, Nsukka.

Managing agency

National Universities Commission

General details

1)From Sep 2) 6724 (total in Univ.) 3) 5,003m & 1170f 4)English 5)In 1977/78 session some 78 students were accepted mainly from African countries.

Relevant faculties

Medicine (located on the Enugu Campus) - Biological and pharmaceutical sciences

Courses

*** FIRST DEGREES
First degree courses include 3-4 years for biochemistry, with options in nutrition, pre-clinical, and for microbiology. 4-5 years for pharmacy, with options in drug development, pharmacology, pharmacognosy, pharmaceutical sciences. 5-6 years for medicine.
General admission requirements are GCE with not less than 3 subjects at 'A' level; candidates with WASC or 'O' level GCE may take an entrance examination. There are subject requirements depending on course taken.

**** HIGHER DEGREES
Postgraduate degrees of Doctor of Medicine, Master of Science, Master of Philosophy and Doctor of Philosophy are offered in many areas of microbiology and in medical science.
Relevant first degree.

Note

See also NIG 40

NIG 49 WHO TRAINING CENTRE FOR HEALTH SERVICES PERSONNEL

Enquiries

The Co-ordinator of Studies, WHO Training Centre for Health Services Personnel, P.O. Box 1036, Yaba, Lagos.

Managing agency

World Health Organization

Nigeria

General details

1)From Jan - 6 courses a year 2) 121 3) 10m & 10f per course 4)English 5)Courses are for all English-speaking countries of the WHO African region and c.96 candidates per annum are non-Nigerian (see Note).

Courses

*** LABORATORY TECHNOLOGY - TEACHING METHODOLOGY
A 6-week course of lectures, group discussions and case studies, aimed at giving the participants basic knowledge in planning, designing, operating and evaluating programmes for the training of laboratory technologists who will be required to work at the peripheral and intermediate levels of the health services.
Laboratory technicians with at least ten years' experience, who are or will be involved in training laboratory technologists.

*** MALARIA CONTROL TECHNIQUES
3-month course, including classroom/workshop and field activities, to give a background knowledge of simple medical entomology, elementary malaria epidemiology and parasitology, and malariology. The participants will be prepared also to perform simple geographical surveys, carry out malaria control measures and apply simple measures for the control of some communicable diseases.
Officers holding junior operational positions in the health services of their countries, who will function as malaria assistants and entomological technicians in malaria control techniques.

*** MEDICAL/HEALTH ADMINISTRATION
8-week course for medical secretaries and other administrative health service personnel, covering medical services secretarial system, hospital secretarial system, secretarial systems of supporting services (supplies, laboratories, etc), to enable participants to organize secretarial support in a managerial office at the central and peripheral level.
Intermediate-level administrative staff capable of running health services management efficiently at the central level (medical office managers, administrative services managers) and at the peripheral level (health service managers).

*** PUBLIC HEALTH - ADMINISTRATION AND SUPERVISION
10-week course, of classroom and field activities, to refresh and give students the opportunity to acquire new knowledge in the field of administration, communicable disease control, environmental health, health education, training and supervision, maternal and child health, and the simple clinical diagnoses and treatment of common paediatric ailments.
Public health nurses and midwives with public health experience; all candidates are expected to have at least 5 years' practical experience.

**** ENVIRONMENTAL HEALTH AND COMMUNICABLE DISEASES CONTROL
2-month course of lectures, group discussions, case studies and field activities, aimed at orientating participants towards environmental health problems of rural and urban areas in Africa, and of planning ways and means of their solution; planning and operating communicable disease control techniques and control of disease vectors. Emphasis is on an integrated approach to community health promotion and protection, planning and executing health education activities and the assumption of training and supervisory responsibilities within the health services team.
Medical officers, sanitary engineers and senior health inspectors engaged in community health.

**** HEALTH SERVICES SUPERVISION
3-month course of lectures, group discussions, case studies, field activities, clinical and laboratory work, aimed at providing opportunities to acquire new knowledge in the field of organization, planning, administration and supervision of the peripheral health services; in health education; maternal and child health; the control of communicable diseases, the clinical diagnosis, treatment and management of patients; as well as knowledge of simple laboratory techniques. This is an orientation course for health centre superintendents.

Medical assistants, senior qualified nurse/midwives or senior male nurses who have been in service for at least five years.

Note

The courses described above made up the proposed programme for 1979, and subsequent programmes may differ. Participants are awarded a Certificate of Attendance. The English speaking countries of the African region for which the courses are designed are Botswana, Cameroon, Ghana, Kenya, Lesotho, Liberia, Mauritius, Seychelles, Sierra Leone, Sudan, Swaziland, Tanzania, Zanzibar, Uganda, Zambia, Ethiopa, Nigeria and Namibia.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Papua New Guinea

The base of the pyramid of primary health care in Papua New Guinea is provided by aid posts. These are the smallest health care units and serve a population of between 500 and 3,000. There are about 1,800 of them and more are being established, particularly where communications are poor.

An Aid Post is manned by an aid post orderly (APO), a frontline worker who after a primary education of six years undergoes a training programme of two years during which he acquires sufficient basic health knowledge to

- provide curative treatment for common diseases;
- recognize complications and refer difficult cases to a health centre or hospital;
- provide domiciliary treatment for tuberculosis and leprosy;
- assist in the diseases control programmes, such as immunization, passive case detection in malaria control;
- assist in family health services (nutrition surveillance, family planning, school health etc.);
- assist maternal and child health sisters during mobile clinics;
- patrol regularly to create awareness of the health problems in the community.

APOs receive formal and informal in-service refresher courses and supportive supervision from health centre personnel such as health extension officers, doctors, community health nurses, disease control officers, malaria control supervisors, health inspectors.

Currently some pilot projects have been launched to introduce the new trends in primary health care, which emphasize active participation by the community in all aspects of planning and implementation of health programmes, and to integrate health with the other sectors involved in welfare and development.

PNG 1 **COLLEGE OF ALLIED HEALTH SCIENCES, MADANG**

Enquiries: Dean, College of Allied Health Sciences, Box 2033, Yomba, Madang Province. Tel: 822788; telegram: PARAMED MADANG

Managing agency: Health Department, Konedobu

General details: 1)Jan-Dec 2) 250 3) 250m 5)Students are accepted from Pacific countries.

Courses:

* HEALTH CARE
1-year certificate course, with 1-year apprenticeship in-service, for aid post orderly, to provide staff for primary health care institutions (aid posts).
2 years secondary schooling; minimum age 17 years.

** HEALTH INSPECTOR
3-year certificate course in health inspection, to provide urban and rural health inspectors. (Candidates may enter for RSH exams at end of training period.)
Four years secondary schooling, credit passes; minimum age 17 years.

** HEALTH EXTENSION
3-year diploma course in health extension plus 1-year residency, to provide health centre doctors and health team managers. Subjects include child health, disease control, health services management, medicine, obstetrics, personnel management, and surgery.
As for Health Inspector course, above.

PNG 2-6 PUBLIC HEALTH DEPARTMENT TRAINING

Enquiries Secretary, Department of Public Health, P.O. Box 2084, Konedobu. Tel: 211588; telegram: Health Port Moresby

Courses Public Health Department training courses outlined below (a-p) take place in Papua New Guinea's main training institutions. A list of these institutions and their location (PNG 2-6), keyed for courses, follows the course list. (See also PNG 1).

(a) * MALARIA ERADICATION
6-month certificate course followed by 6 months under area supervision for malaria eradication officer (area supervisor).
Good pass after 2 years secondary education, or malaria eradication experience, men only.

(b) ** MALARIA LABORATORY TECHNOLOGY
6-month certificate course for medical laboratory assistant, specializing in either parasitology or entomology.
Four years' secondary education.

(c) ** MEDICAL TECHNOLOGY
1-year certificate course for medical laboratory assistant (malaria or general).
(d) Also 3-year certificate course for medical laboratory technician.
Four years' secondary education. Candidates for technician course should have credits in English, maths and science.

(e) ** DENTAL TECHNOLOGY/THERAPY
3-year certificate course for dental technician (male only).
(f) 2-year certificate course for dental therapist (M & F).
Four years secondary schooling with credits.

(g) ** DISPENSING
3-year certificate course in dispensing, comprising 1½ years formal training and 1½ years apprenticeship under a qualified pharmacist.
Four years secondary schooling with credits.

(h) ** HEALTH SERVICES ADMINISTRATION
1-year diploma course to prepare candidates for middle management role in hospital or health administration (male only).
Health workers with previous experience and a pass after 3 years secondary education. A pass after 2 years secondary education, together with administrative experience, may also be accepted, but places are limited.

(i) ** RADIOGRAPHY
3-year certificate course for radiographer.
Four years secondary education with credits in English, maths and sciences.

(j) ** NURSING
3-year certificate course for enrolled nurse (polyvalent: community health and hospital nursing).
(k) 3-year certificate course for general nurse.
Four years secondary education with credits.

(l) *** NURSING
1-year post-basic certificate courses, registerable with Nursing Council PNG as additional qualification, in midwifery, in psychiatric nursing, in operating theatre management and techniques, and for nurse anaesthetist (men only).
Registered and enrolled nurses.

(m) *** NURSING EDUCATION/ADMINISTRATION
1-year diploma course in nursing education - to prepare candidates for teaching posts in schools of nursing; and in nursing administration - for senior nursing administrative positions in the nursing service, hospitals and community health.
Registered nurses with at least 2 years nursing experience; preferably with some experience in teaching for education, and 6 months experience at matron level for administration course.

(n) *** HEALTH EDUCATION
1-year diploma course in health education, including health sciences, education methods and media, and social sciences, to train health educators for work with government and private industry. A minimum period of 10 weeks is spent in practical field work.
Four years secondary schooling plus a basic health course (or education, or welfare), and with field experience.

(o) *** COMMUNITY HEALTH
1-year diploma course to prepare candidates for supervisory roles in community health work.
Registered nurse or health extension officer with at least 2 years' field experience.

(p) *** MEDICAL TECHNOLOGY
2-year diploma course in medical technology to train candidates as general technologists, with occasional opportunities to specialize in biochemistry, haematology, histopathology, microbiology, or water and sewage analysis.
Trained medical technicians with at least 2 years' experience; places are limited.

PNG 2 **COLLEGE OF ALLIED HEALTH SCIENCES, PORT MORESBY**
(c), (d), (g), (h), (i), (l), (m), (n), (o), (p).

PNG 3 **DENTAL COLLEGE, PORT MORESBY**
(e), (f).

PNG 4 **NATIONAL MALARIA TRAINING CENTRE, YAGAUM, MADANG**
(a), (b).

PNG 5 **SCHOOL OF NURSING, ARAWA (NORTH SOLOMONS)**
(k).

PNG 6 **SCHOOL OF NURSING, PORT MORESBY**
(k).

Various other Schools of Nursing
(j)

PNG 7 UNIVERSITY OF PAPUA NEW GUINEA

Enquiries The Dean, Medical Faculty, University of Papua New Guinea, P.O. Box 5623, Boroko.

General details 1)Jan-Nov in 2 semesters 2) 115 3) 120 single places, 9 flats for married students 4)English 5)Up to 9 students have been accepted annually from other countries, such as Australia, Philippines, Western Samoa, Tonga, USA, New Hebrides, Caroline Islands, Marshall Islands, Solomon Islands.

Relevant departments Clinical sciences - Community medicine - Human biology - Pathology - Dentistry

*** FIRST DEGREES
5 years for first degrees in dental surgery, medical science, and science.
Australian matriculation or other acceptable qualification, plus residence in Papua New Guinea for the previous 2 years, for medicine, otherwise 6 months. Age 17+.

**** MASTER'S LEVEL
The Master of Medicine course is 4 years and open only to registered medical practitioners with at least one year's experience in Papua New Guinea.

**** POSTGRADUATE DIPLOMAS
1-year postgraduate diploma courses in child health and in obstetrics/gynaecology are offered to fully registered medical practitioners.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

St Lucia

St Lucia is a mountainous country with an area of 238 square miles and a population of about 130,000. The policy of the government in the promotion of better health is concentrated particularly in the areas of health education, nutrition, immunization and family planning.

There are two general hospitals - the government Victoria Hospital and the privately-run St Jude Hospital - two district hospitals, and a psychiatric hospital. Primary health care is discharged through the island's 24 health centres and the two district hospitals which, in addition, provide in-patient facilities.

In the area of maternal and child welfare services, increased emphasis is being placed on the 'at risk' mother and district nurses are encouraged to refer such cases to the doctor in the district. Post-natal care services are available throughout the island. A programme of home visiting is undertaken by health education and nutrition officers and aides, to provide information and advice on nutrition - particularly to mothers of babies and children up to five - to encourage food production from kitchen gardens, and generally to inform about and encourage the use of the island's health facilities.

The use of child health 'passports' and clinic child welfare cards assists in the maintenance of individual health records. Immunization of children is improving but still inadequate. A target of 70 per cent was set for 1978 (compared with an achievement of 55 per cent in 1976).

Population growth is a major problem area as St Lucia has one of the highest birth rates in the Caribbean. An advisory board to the government on family planning was due to be instituted late in 1978 after training of suitable staff.

The training of community health aides is taking place with assistance from PAHO/WHO, the target being to provide one aide for every 1,000 people. Short courses for the training of health personnel are also held from time to time and students are sent for training in Trinidad, elsewhere in the Caribbean and to other countries.

SLU 1 SCHOOL OF NURSING, VICTORIA HOSPITAL

Enquiries Ministry of Health and Education, Castries.

Courses

** NURSING
3-year course in general nursing, leading to the qualification of Registered Nurse.
GCE level.

*** MIDWIFERY
1-year course in midwifery, leading to the qualification of Registered Nurse/Midwife.
Registered nurses.

Note The School also has an assistant nurse training programme.

St Vincent

St Vincent, with its population of some 110,000, is already broadly divided into nine medical districts, each under the control of a resident medical officer. Each district contains about four clinics staffed by a resident Registered Nurse/Certified Midwife assisted by assistant nurses and/or community health aides. The nurse and her assistants attend to all injuries and medical emergencies, assist at doctor's clinics, and conduct the natal, post-natal, family planning and child welfare clinics, which include comprehensive immunization. The nurse also attends confinements in her district and makes home visits. Each district has a public health inspector and pharmacist. The national family planning team, community nutritionist, health educator, and domiciliary mental health team support the nurse by regular visits.

The twelve Grenadine islets spread over some thirty miles of sea are divided into two districts and have a total of six clinics staffed and operated as the main island.

There are three rural hospitals in the territory - one of which is in the Grenadines - a general hospital with 211 beds, a Hansen home with 12 beds, a geriatric hospital with 120 beds, and a mental health centre with 120 beds.

SV 1 **CANSAVE ST VINCENT CHILD WELFARE TRAINING CENTRE**

Enquiries: Windward Islands Representative, CANSAVE, P.O. Box 203, Kingstown, St Vincent, West Indies. Tel: 61790; telegram: CANSAVE

Managing agency: CANSAVE, Toronto, Canada.

General details: 1)Jan-Jun, Jul-Dec 2) 20 3) 20f 4)English 5)Students from other Caribbean countries are accepted.

Course:

* CHILD CARE
6-month course in child care, including subjects such as hygiene, growth and development, care of nursery and equipment, sociology, nutrition, health; to provide assistants for day nurseries or pre-school groups.
Preferably GCE 'O' level standard or 4 years secondary education. Applicants with primary school leaving certificate plus some experience are required to take an aptitude test.

** CHILD CARE
1-year course of generic training for workers in child care and development, leading to a Certificate in Child Care, similar to above course, but to provide supervisors/managers for day nurseries or pre-school groups.
As for Child care course, above.

SV 2 **SCHOOL OF NURSING AND HEALTH SCIENCE**

Enquiries: Senior Nursing Officer (Education), c/o Ministry of Health, Kingstown.

General details: 1)From Sep (for nursing), and Jan (others) 2) 150 (total under training) 3) 50 4)English 5)No students from other countries have so far been accepted, but this is not ruled out.

Courses:

* COMMUNITY HEALTH AIDE/FAMILY PLANNING
6-8 weeks of training for community health aides, to work with families, identifying health problems which should be brought to the attention of the nurse; 8-10 weeks of training for family health field

workers to work with communities and families in the field of family planning.
Candidates with mature outlook, though limited formal education.

** NURSING
18-month course for enrolled nurse, to provide assistant nurses to RNs over the whole range of their duties.
GCE 'O' level in 1 or 2 subjects, age 18 years.

** NURSING
3-years for State Registered Nurse, to produce a comprehensively trained nurse to work in a hospital or community setting.
Minimum GCE 'O' level in 3 relevant subjects, age 18 years.

** HEALTH CARE
9-12 month courses to introduce students to the team concept of the delivery of health care; the St Vincent Health Science and its specific problems, the professional discipline of the student's choice.
GCE 'O' levels in 3-5 relevant subjects, age 18 years.

*** MIDWIFERY
1-year course for State Certified Midwife, to qualify RNs to work in the hospital or community.
Registered nurses.

Note — The School works closely with the Regional Nursing Body and has association with other Regional Training Centres. In-service training courses for every discipline are conducted to up-grade professional skills. In all courses strong emphasis is placed on health education, nutrition and family planning.

Seychelles

The medical service in Seychelles is currently based on its four hospitals and its eight district clinics.

The main hospital is the 235-bed Victorial Hospital on the main island of Mahe. In the south of Mahe there is the small 15-bed Anse Royal Hospital; its resident doctor will be joined by a second doctor some time in 1979. There is a 9-bed hospital on Praslin, the second most inhabited island - again with one resident doctor to be joined by another in 1979. This serves the island's population of 4,343. The 21-bed hospital at La Digue serves that island's population of 1,911, and a resident doctor will be posted there in 1979.

The eight district clinics, each with a resident nurse, also provide primary health care. The clinics are visited regularly by doctors of the maternal and child health/family planning unit. The clinics are supplemented by community social centres, and it is the intention to send nurses and doctors to visit these centres more often.

The official policy is to decentralize services as soon as possible. Doctors will be posted to some of the district clinics, so that patients will not have to travel to the main hospital in the capital. District health teams are planned, consisting of a doctor, two nurses, a health inspector and a social worker. The teams will be able to provide more domiciliary visits, not only to treat sick people but also to implement the preventive health care programme. There will be an island doctor to cover outlying islands where there is no resident doctor or nurse. He will visit islands on a periodic basis, and the medical assistants will be trained, to be stationed permanently on some of the islands.

The family planning programme is being extended, with active support from politicians, medical staff, and the community. In the past SRN nurses were trained only for ward work, but since January 1978 all nurses have been receiving theoretical and practical training in maternal and child health, as well as family planning, in public health nursing and in psychiatric nursing. Over 90 per cent of registered nurses take up a year's course in midwifery. From January 1979 there will be a course for nursing auxiliaries, with the emphasis on practical training.

The Government is pressing forward with the programme to train more health inspectors, with emphasis on techniques of educating and motivating the population to participate in maintaining a clean home environment. Health inspectors will be posted to outlying districts where they will be closer to the people. The programme to supply treated water to all people is progressing well. The huge reservoir at La Gogue will be completed shortly and it is hoped that the supply of treated water will be extended to the south of Mahe in 1980. The housing programme has been given top priority. The EEC has made available around US $3 million for building low cost housing, with bathrooms and piped treated water.

A health education council is currently being formed, which will work closely with radio, national newspaper, schools, women's league, trade unions, the police and the army, in efforts to encourage community participation, especially in preventive health care.

SEY 1	VICTORIA HOSPITAL
Enquiries	Chief Medical Officer of Health, Victoria Hospital, P.O. Box 52, Seychelles. Telegram: Minhealth.
Managing agency	Ministry of Health

Courses

** PUBLIC HEALTH INSPECTION
3-year course in public health inspection, covering administration, housing and sanitation, infectious disease, food inspection, lighting and ventilation, pestology and rodent control, building construction, sewage and refuse disposal, water supplies, port and airport health, costing and estimating, statistics, practical inspection and reports.
GCE 'O' level standard of education, preferably including maths and a science subject; applicants of either sex. Candidates without the entry qualification may be considered if suitable on other grounds.

** NURSING
3 years for Seychelles Registered Nurse (the course is the same as in the UK).
GCE 'O' level.

*** MIDWIFERY
1-year course for Seychelles Certified Midwife.
Registered nurses.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Sierra Leone

Delivery of health care services in Sierra Leone is at primary, secondary and tertiary levels. These are delineated within administrative boundaries: district, provincial and national levels. Primary health care at district level is headed by a polyvalent district medical officer and based at district hospitals of about 50-80 beds, with out-reach of factilities throughout the district.

Health centres are manned by nurse/dispensers (medical assistants), midwives, community health nurses and public health workers. There are usually 3-5 of these centres in each district with up to 6 beds at the health centre. Personnel carry out screening procedures, maternal and child health care, diagnosis of common ailments (visual, symptomatic and common endemic communicable diseases), health education, immunization and public health and sanitary measures.

Health post and treatment centres are staffed by a cadre of personnel with limited training in endemic disease control measures, and treatment of a limited range of endemic diseases.

At chiefdom and village levels, there are traditional birth attendants, dispensary assistants and public health aides. Except for the village maternity aides - who are paid partly by central government and partly by the local authorities - these personnel are usually already employed on some community project in the chiefdom which takes care of their remuneration.

In short primary health care is headed by polyvalent district medical officers with out-reach to chiefdom and village levels, through paramedicals, auxiliary aides and voluntary workers with varying levels of training.

SIE 1	**CONNAUGHT HOSPITAL, DEPARTMENT OF POSTGRADUATE STUDIES**
Enquiries	Director, Department of Postgraduate Studies, Connaught Hospital, Freetown. Tel: 23280.
Managing agency	Ministry of Health
General details	1)From Sep 2) 16 3)Some 4)English 5)Up to 5 students a year have been accepted from Gambia.
Relevant departments	Medicine - Obstetrics & gynaecology - Paediatrics - Surgery.
Courses	**** MEDICAL OFFICER ORIENTATION 2-year internship programme made up of 6 months in each of the department disciplines, to provide training for the polyvalent district medical officers in developing countries. *Degree from recognized medical school or college* **** MEDICAL OFFICER ORIENTATION 1-year orientation programme made up of 3 months in each of the department disciplines above, for district medical officers in developing countries. *As for Internship programme, above. Previous pre-registration experience recognized by the Licensing Authority for their own nationals.*
Note	See also SIE 2 and 3

SIE 2 **CONNAUGHT HOSPITAL, DISPENSING SCHOOL**

Enquiries: Chief Dispenser, Dispensing School, Connaught Hospital, Freetown. Tel: 26334

Managing agency: Ministry of Health

General details: 1)Jan and Jul 2) 26 3)None 4)English 5)No students from other countries have so far been accepted.

Courses:

** DISPENSING
3-year course covering practical dispensing, toxicology and prescription writing, to train dispensers for hospitals and health centres, and leading to Druggist Certificate.
GCE 'O' level

*** DISPENSING
1-year course in practical dispensing, toxicology and prescription writing, leading to certificate as above.
SRN certificate

Note: See also SIE 1 and 3

SIE 3 **CONNAUGHT HOSPITAL, SCHOOL OF LABORATORY TECHNOLOGY**

Enquiries: Director, School of Medical Laboratory Technology, c/o Connaught Hospital, Freetown.

Managing agency: Ministry of Health

General details: 1)Varies 2) 15 3)None 4)English 5)No students from other countries have so far been accepted.

Courses:

** LABORATORY TECHNOLOGY
3-year basic programme in laboratory technology, including practical training in Central Pathology Laboratory, leading to Certificate. The course teaches to the intermediate level of the AIMCT of Britain or OND Laboratory Technology.
GCE 'O' level in 5 subjects including credit in 3 science subjects and pass in English and maths.

Note: See also SIE 1 and 2

SIE 4 **MATERNAL & CHILD HEALTH DIVISION, DISTRICT HEADQUARTERS BO**

Enquiries: Director, Maternal & Child Health Services, Freetown. Tel: 22961

Managing agency: Ministry of Health

General details: 1)Mar & Nov 2) 60 3)None 4)Mende, Temne & Krio 5)No students from other countries have so far been accepted.

Courses:

* MATERNAL & CHILD CARE
3-week course for traditional birth attendant, to improve the skills in maternal and child health care at village level.
Candidates who are already much involved in the care of pregnant women and delivery

SIE 5 **NATIONAL SCHOOL OF HYGIENE**

Enquiries — Principal, National School of Hygiene, Government Wharf, Freetown. Tel: 23091

Managing agency — Ministry of Health

General details — 1)Sep-Dec, May-Aug, Jan-Apr 2) 30 3)None 4)English 5)No students from other countries have so far been accepted.

Courses

** PREVENTIVE MEDICINE
3-year course in preventive medicine and environmental health, to train health personnel capable of executing, promoting and propagating public health, and leading to Royal Society of Health Diploma.
GCE 'O' level in 5 subjects at not more than two sittings

SIE 6 **NATIONAL SCHOOL OF NURSING**

Enquiries — Principal, National School of Nursing, Lightfoot-Boston Street, Freetown. Tel: 24326

Managing agency — Ministry of Health

General details — 1)SRN from Nov, others Mar & Sep 2) 256 3) 129f 4)English 5)2 candidates are accepted annually, from Nigeria and Zimbabwe.

Courses

* NURSING/COMMUNITY HEALTH
3 years for state enrolled community health nurse, comprising 18 months general nursing, 9 months midwifery, 9 months public health.
Minimum 11 years schooling (Form IV), age 18-30 years

** NURSING
3 years for state registered nurse.
Minimum 3 GCE 'O' levels, including English and 1 science subject, age 18-25 years

*** MIDWIFERY
1 year for state certified midwife.
State registered nurses

Note — The Institution has had close links with the Ministry of Social Welfare for community development, marital problems, juvenile deliquency and adoption, with the Health Education Unit, and the Planned Parenthood Association for post-basic training of pupil and student nurses. Support has been received from UNICEF, WHO and ODM.

SIE 7 **PRINCESS CHRISTIAN MATERNITY HOSPITAL MIDWIFERY SCHOOL**

Enquiries — Senior Midwifery Tutor, Princess Christian Maternity Hospital, Fourah Bay Road, Freetown. Tel: 50048

Managing agency — Ministry of Health

General details — 1)Jan-Dec, Jan-Jun 2) 15 3)None 4)English 5)No students from other countries have so far been accepted.

Courses

** MIDWIFERY
18-month course for auxiliary midwife, covering antenatal, neonatal, intra and post partum care, and leading to SCMC (State Certified Midwife Certificate).
SEN certificate

(Continued)

*** MIDWIFERY
12-month course of professional midwifery training, leading to SCMC.
SRN certificate

SIE 8 **REGIONAL CENTRE FOR TRAINING TECHNICIANS**

Enquiries: Medical Electronics Engineer, Regional Centre for Training Technicians, WHO/Ministry of Health, Freetown (Project ICP/HMD/018). Tel: 30307

Managing agency: WHO/Ministry of Health

General details: 1)Varies 2) 16 3)None 4)English 5)Students have been accepted from Liberia, Ghana, Tanzania, Kenya and Botswana - no fixed intake.

Course: ** MEDICAL EQUIPMENT TECHNOLOGY
13-month course for medical equipment technician in the maintenance and repair of medical equipment.
Minimum GCE 'O' level or equivalent in physics, chemistry, maths, English and general science, preferably with 2-year technical school certificate in electrical and electronic engineering

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Singapore

Singapore's Division of Primary Health Care Services, formed in 1976, brought together outpatient (curative) and maternal, child and school health (preventive) services under one administration. This now enables a more flexible and rational utilization of existing resources, with an intersectorial approach linking preventive and curative health activities at primary health care level.

With the reorganization, integrated outpatient and maternal and child health (MCH) services are provided under the same roof, wherever possible. At the end of 1977, primary health care services were provided through 7 polyclinics, 21 outpatient dispensaries and 27 maternal and child health clinics.

A further development, with the reorganization, was the integration of the various home nursing services. Previously outpatient services had been provided by the district nursing service while the maternal and child health services provided domiciliary after-care and home visits in connection with family planning and immunization defaulters. The present integrated home visit nursing services are based at 31 MCH clinics and they provide a whole range of home nursing functions, including the expanded home-care services of the Home Nursing Foundation for the aged, disabled and chronic sick.

The outpatient services provide primary therapeutic care from strategically situated outpatient dispensaries during normal working hours from Mondays to Saturdays and an emergency medical service at 5 clinics on Sundays and public holidays. Services for employees of Government and certain statutory boards are provided at 5 staff dispensaries. In 1975 a nurse practitioner scheme was initiated under which nurses are provided with in-service training to enable them to carry out their function of providing health care at an intermediate level.

The MCH clinics provide a comprehensive health care programme for women of childbearing age and children from birth to six years. The service includes family planning, ante-natal care, post-partum and post-natal services, breast and cervical cancer screening for women, immunization and health screening for children, guidance and advice on child care with treatment of minor ailments, as well as an intensive health education and home visiting programme. Health education for mothers includes nutritional demonstrations, advice on mothercraft and child care, and teaching mothers breast self-examination.

Other functions of the MCH services include the supervision of the Central Immunization Registry and co-ordination of the computerization of the immunization programme, supervision of private midwives, registration of births in the rural areas, assisting the Social Welfare Department in looking after the welfare of transferred, adopted and fostered children, and participation in community health activities.

The school health services provide preventive and primary health care services for approximately half a million school children. Medical appraisals are done at selected periods of school attendance. These examinations include an assessment of the general health and nutritional status, emotional and mental development, visual acuity, colour vision and hearing.

The school health services also provide follow-up care and deal with children who have cardiological problems, refractive problems, problems of hearing, emotional and behavioural problems, problems associated with education and underachievement, nutritional problems of obesity and undernutrition, recurrent respiratory conditions affecting health and education, and orthopaedic defects. Counselling for genetic disorders is also carried out.

*** INTENSIVE CARE NURSING
1-year post-basic course in intensive care nursing.
Registered nurses, with 2-3 years experience

*** OPERATING THEATRE TECHNIQUES
1-year post-basic course in operating theatre techniques.
Registered nurses, with 2-3 years experience.

*** PSYCHIATRIC NURSING
1-year post-basic course in psychiatric nursing.
Registered nurses, with 2-3 years experience.

SNG 3 SINGAPORE GENERAL HOSPITAL, SCHOOL OF RADIOGRAPHY

Enquiries: Director, School of Radiography, c/o Singapore General Hospital, Outram Road, Singapore 3. Tel: 2223322 extension 282; telegram: Genhosp.

Managing agency: Ministry of Health

General details: 1)May-Apr 2)c.15p.a. 3)None 4)English 5)Two students may be accepted annually from, for example, Philippines, Thailand, Malaysia and Bhutan.

Courses:

*** DIAGNOSTIC RADIOGRAPHY
2-year course in diagnostic radiography leading to the Diploma of the College of Radiographers (UK). Training covers hospital practice and care of patients, anatomy & physiology, physics, radiographic photography, equipment for diagnostic radiography, radiographic technique.
Singapore-Cambridge GCE or equivalent in 5 subjects - 2 at 'A' level - including English, maths, physics or physical science, and one other science subject, preferably biology. Age 18+

*** RADIOTHERAPY
2-year course in radiotherapeutic radiography leading to examination board diploma issued by Ministry of Health, Singapore. Training covers hospital practice and care of patients, anatomy and physiology, radiotherapy physics and equipment, principles of radiotherapy and oncology, radiotherapy technique.
As for Diagnostic radiography course, above.

**** DIAGNOSTIC RADIOGRAPHY
6-month course in advanced diagnostic radiographic techniques, the main purpose of which is to provide training for overseas candidates. Training can be tailored to meet special requirements and is by practical attachment to departments of diagnostic radiology in several large/specialised hospitals.
Qualified diagnostic radiographers with at least 5 years post-diploma experience; age below 40 years.

SNG 4 UNIVERSITY OF SINGAPORE

Enquiries: Registrar, University of Singapore, Kent Ridge, Singapore 5. Tel: 7756666; telegram: Unispore.

General details: 1)Jul-Mar 2) 932 (medicine, dentistry & pharmacy) 3) 500m & 486f (total in univ.) 4)English 5) 155 undergraduates and 49 post-graduates were accepted for 1977/78 courses in medicine, dentistry & pharmacy, coming from Malaysia, Hong Kong, Thailand, Korea, Indonesia, Africa, Bangladesh, Australia, Philippines, Burma and India.

SNG 1 **INSTITUTE OF DENTAL HEALTH**

Enquiries: Senior Dental Surgeon (Training), Hyderabad Road, Alexandra Park, Singapore 5.

Managing agency: Ministry of Health

General details: 1)Aug-Sep 2) 140-200 3)None 4)English 5) 4-6 students are accepted annually from, for example, Malaysia, Burma, Hong Kong, Thailand, Brunei, Trust Territories of Pacific Islands, Vietnam.

Relevant departments: Dental nursing - Dental therapy - Dental technology & prosthetics - Outpatients

Courses:

** DENTAL ASSISTANT
2-year course for chairside assistants, leading to Certificate for Assistant Nurse (Dental).
Cambridge 'O' level Certificate, female, single and below 25 years.

** DENTAL NURSING
2-years institutional training and 1-year field training, leading to Certificate for Dental Nursing (New Zealand type course).
Cambridge 'O' level Certificate, preferably with science subjects, and pass in the Institute's manual dexterity test, single, age below 25.

** DENTAL TECHNOLOGY
2 years institutional training and 1-year field training leading to Dental Technicians' Certificate.
Cambridge 'O' level Certificate and pass in the Institute's manual dexterity test.

*** DENTAL THERAPY
1½-year course leading to Certificate for Dental Therapy, and covering routine conservative dentistry including inlay work, full and partial dentures, extractions of teeth.
Certificate for Dental Nursing with minimum five years field experience as a dental nurse.

Note: The Institute's present building was completed in 1977 and is equipped with very modern equipment and good training facilities.

SNG 2 **SINGAPORE GENERAL HOSPITAL, SCHOOL OF NURSING**

Enquiries: Principal Nursing Officer, School of Nursing, c/o Singapore General Hospital, Singapore 3.

Managing agency: Ministry of Health

General details: 1)Varies 2)Up to 800 3) 300f 4)English 5)A few students are accepted annually from ASEAN countries.

Courses:

** NURSING
2-year course of pupil assistant nurse training, for state enrolled nurse.
Minimum 3 GCE 'O' levels, age 16-25 years.

** NURSING
3-year course of general student nurse training, leading to state registered nurse. (State enrolled nurses may qualify in two years).
Minimum 3 GCE 'O' levels, age 16-25 years.

*** MIDWIFERY/CHILD CARE
1-year post-basic course in midwifery, paediatrics and community health care.
Registered nurses, with 2-3 years experience.

Singapore

Relevant departments

Anatomy - Biochemistry + Medicine - Microbiology - Obstetrics & gynaecology - Oral surgery - Orthopaedic surgery - Paediatrics - Pathology - Pharmacology + Pharmacy + Physiology + Prosthetic dentistry - Social medicine and public health - Surgery.

Selected courses

*** FIRST DEGREES
3-year course for general degree in pharmacy and science, additional year for honours degrees with specialization in biochemistry, pharmacy and physiology; 4 years in dental surgery; 5 years in medicine/surgery. *Two 'A' level passes in Singapore-Cambridge GCE, with additional requirements for entry to particular courses.*

**** MASTER'S LEVEL
1 year for Master of Science (Public Health) and for Master of Science (Occupational Medicine). Full-time revision courses for MMed are offered in anaesthesia (8 weeks), advanced surgery (12 weeks), internal medicine (8 weeks), paediatrics (8 weeks), obstetrics and gynaecology (3 weeks). Dentistry specializations are oral surgery, operative dentistry, and prosthetic dentistry, and range from 2-6 weeks.

**** PhD requires from two to five years, and DSc is awarded on published work five years after PhD.

Note

Incorporated in the University is a School of Postgraduate Medical Studies and a School of Postgraduate Dental Studies.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Solomon Islands

The Solomon Islands (population 200,000) lie in the Pacific Ocean 1,000 miles west of Australia and consist of a scattered archipelago of mountainous islands and low-lying coral atolls. The capital is on Guadalcanal and the five other biggest islands are Choiseul, New Georgia, Santa Ysabel, Malaita and San Cristobal.

The Ministry of Health and Medical Services' chief functions are advisory and co-ordinating. Medical services are provided through local councils, with the exception of the central hospital in Honiara and the Honiara urban nursing services. The councils have their own medical and nursing staff and in most cases a base hospital. A number of hospitals and medical care centres are provided and maintained by the churches.

Malaria has always been regarded as the main health threat in the Solomon Islands and in 1970 the Government instituted a full-scale eradication programme, which has had considerable success and in a number of islands only surveillance is now necessary. Greater emphasis is being placed on BCG immunization of all newly-born children. The treatment of leprosy is supervised by a central leprosy register. There are leprosy field workers and a leprosy expert visits the country at regular intervals.

The Solomon Islands Planned Parenthood Association arranges information services; there is a mobile unit and advice is given at clinics.

SOL 1 **SOLOMON ISLANDS SCHOOL OF NURSING**

Enquiries Principal Nursing Tutor, Solomon Islands School of Nursing, P.O. Box 349, Honiara.

Managing agency Ministry of Health and Welfare

General details 1)Jan 3)Yes 4)English 5)Students from other countries may be accepted if sponsored by their governments.

Courses

** NURSING
3 to 3½ years certificate course in general nursing for Registered nurse.
5 years secondary education with maths, English, biology and general science.

*** NURSING AND MANAGEMENT
6 months post-basic certificate course in nursing and management, including community and child health, teaching methods, and supervision, management and administration.
Registered nurse with at least two years experience.

Note The School of Nursing also runs annual short courses for hospital aides (7 weeks) and health (community) aides (6 weeks) for candidates with 7 years primary education.

Sri Lanka

In Sri Lanka a number of different types of institution deliver primary health care. Even in remote rural areas no one is more than eight miles from some medical care and the majority are within two miles. In each area there is a Medical Officer of Health to supervise the organization and operation of the institutions under his charge.

The smallest units are the visiting stations, of which there are 506, and the branch dispensaries, 137. The main difference between them is that the branch dispensaries have a stock of drugs and the visiting stations have not. Both function about twice a week and some elementary curative care is given by the visiting assistant medical practitioner (AMP) with the assistance of public health nurses and midwives. Child welfare and anti-natal clinics are held.

There are 309 central dispensaries each under the care of an AMP which are open every morning of the week. They provide AMPs for the visiting stations and branch dispensaries. Twenty four central dispensaries have maternity homes attached to them, each in charge of a midwife who cares for normal deliveries. More complicated cases are referred to specialized institutions.

Rural hospitals, of which there are 85, provide in- and out-patient treatment and have 12 to 30 beds. Some rural hospitals are under-utilized because some patients prefer to seek treatment at the larger medical institutions.

The next in order are the peripheral units, of which there are 105, each in charge of a medical officer. They consist of a rural hospital, central dispensary and maternity home, and are well utilized, providing as they do a range of treatments. Clinics are conducted on the basis of an integrated approach to the delivering of primary health care, combining the curative and preventive needs of the people in the area. The introduction of volunteers to help with preventive health care has proved to be very successful.

SRL 1 — INSTITUTE OF HYGIENE

Enquiries — Director, Institute of Hygiene, Kalutara. Tel: 042 2659 & 2264.

Managing agency — Ministry of Health

General details — 1)Varies 2)c.150 3) 80m 4)Sinhala and English 5)Students from other countries have been accepted.

Relevant departments — Public health sanitation - Public health nursing - Public health midwifery - Primary health care

Courses

** PUBLIC HEALTH INSPECTION
12-month Diploma course in public health, to provide public health inspectors for Sri Lanka.
GCE 'O' level, age 18-25 years.

** COMMUNITY HEALTH
6-week basic course in community health, to provide assistant medical practitioners.
GCE 'O' level science, with some experience in medical institutions.

** MIDWIFERY
6-month basic course in public health midwifery, leading to certificate.
GCE 'O' level, age 18-25 years, with some experience in hospital midwifery.

*** PUBLIC HEALTH NURSING
9-month post-basic course in public health nursing, leading to certificate in public health and midwifery. Also further 4-month advanced course.
Qualified staff nurses with at least 3 years experience in a hospital after training, under 35 years.

*** PUBLIC HEALTH MANAGEMENT
1-month training programmes for supervising public health inspector, supervising public health nurse, supervising public health midwife, hospital matron, ward sisters and sister tutors.
Fully qualified and experienced staff in these fields.

**** COMMUNITY HEALTH
1-month course for medical officers of health, covering health unit functions, administration, legislation, planning and management, epidemiology, environmental sanitation and health education.
MBBS, and one year's internship in large hospital.

Note — Proposals have already been made to upgrade the Institute into a National Institute of Health Sciences where it will play a partnership role with the Health Ministry in health planning and manpower planning and development. Support from international and other agencies such as WHO, UNICEF, ODM have already been indicated, and it is hoped to maintain collaborative links with other training institutes, particularly the University of Hawaii.

The Institute currently provides other courses in addition to those described above, including programmes for health educators, and refresher courses for all public health field personnel.

SRL 2 NURSING TRAINING

Enquiries — Director of Health Services, Ministry of Health, Galle Face Secretariat, P.O. Box 500, Colombo 1

Note — There are eight schools of nursing: at Colombo, Kandy, Galle, Kurunegala, Ratnapura, Anuradhapura, Jaffna and Badulla.

Courses

** NURSING
3-year certificate course in basic nursing leading to the qualification of Registered Nurse.
GCE 'O' level.

*** MIDWIFERY
1-year post-basic certificate course in midwifery, leading to the qualification of Registered Nurse/Midwife.
Registered nurses.

Note — The training of attendants takes place at a number of provincial and base hospitals.

SRL 3 POST BASIC SCHOOL OF NURSING

Enquiries — Principal, Post Basic School of Nursing, E.W. Perera Mawatha, Colombo 10. Tel: 93662.

Managing agency — Ministry of Health

General details — 1)Varies 2)On demand 3)None 4)Sinhala & English 5)No students from other countries have so far been accepted.

(Continued)

Courses

*** MIDWIFERY/PUBLIC HEALTH NURSING
1-year course comprising 6 months theory and 6 months field experience in a hospital maternity unit or, for those who will function as public health nurses, in the community.
Qualified nurses in-service.

*** OPERATING THEATRE NURSING
12-week course to prepare staff nurses to ensure optimum safety of the patients undergoing anaesthesia and surgery, and to manage a general operating theatre.
In-service staff nurses.

*** EYE NURSING
12-week course in the effective care of patients with eye disorders, assisting anaesthetist and surgeon, managing eye care unit, and also covering health education for the prevention of eye diseases, etc.
In-service staff nurses.

*** PUBLIC HEALTH
8-week course on newer trends in nursing, to strengthen and update knowledge of nurses.
Public health nurses in-service.

*** NURSING ADMINISTRATION
2-4 week courses in nursing administration to strengthen knowledge of administrative responsibilities and encourage desirable attitudes with a view to improving nursing care.
Senior ward sisters and matrons of hospitals.

Note

The School is the only institute in Sri Lanka which conducts programmes at advanced level for all categories of nursing personnel. WHO assistance is received for conducting workshops/seminars.

SRL 4 **SCHOOL FOR DENTAL NURSES**

Enquiries

Principal, School for Dental Nurses, Maharagama.

Managing agency

Department of Health Services

Courses

** DENTAL NURSING
2-year course in dental nursing, to train school dental nurses to provide dental care to children up to 13 years of age. Emphasis is on preventive dentistry and the detection of orthodontic problems in early stages.
GCE 'O' level in 6 subjects (at not more than 2 sittings), including Sinhala/Tamil, physics, chemistry, biology, a mathematical subject. Candidates should be between 18 and 22 years of age and not less than 4ft 10ins in height.

Note

Trainees have to enter into a bond and agreement with the Director of Health Services to serve the department for a minimum period of ten years on successful completion of training, and to remain unmarried during the training period.

SRL 5 **SCHOOL OF MEDICAL LABORATORY TECHNOLOGY**

Enquiries — Director, Medical Research Institute, Colombo 8. Tel: 92396; telegram: BACTERIA COLOMBO

Managing agency — Director of Health Services

General details — 1)From Oct 2) 60 5)Students have been accepted from other Asian countries.

Courses — ** MEDICAL LABORATORY TECHNOLOGY
2-year course for Certificate of Proficiency in medical laboratory technology of the Department of Health Services, Sri Lanka.
GCE 'O' level passes in 6 subjects with credit passes in biology, botany, chemistry, physics and zoology. Age 18-23 years.

Note — The school was established in 1959 with the assistance of the WHO.

SRL 6 **SRI LANKA SCHOOL OF RADIOGRAPHY**

Enquiries — Radiologist-in-charge, Sri Lanka School of Radiography, General Hospital, Colombo.

Managing agency — Ministry of Health

General details — 1)Jan-Dec 2) 30 3)None 4)English, and (increasingly) Sinhala and Tamil (see Note) 5)Students from other countries have been accepted (see Note).

Courses — (**) RADIOGRAPHY
2-year Certificate courses in diagnostic radiography and in therapeutic radiography.
GCE 'O' level with credits in physics and another science and passes in maths and national language.

Note — The Ceylon School of Radiography was started in 1957 with WHO aid. The government policy to teach in the national languages is likely to affect the intake of students from other countries.

SRL 7 **UNIVERSITY OF COLOMBO, FACULTY OF MEDICINE**

Enquiries — Dean, Faculty of Medicine, University of Colombo, Kynsey Road, Colombo 8. Tel: 95300 and 96421.

Managing agency — University Grants Commission and Ministry of Higher Education

General details — 1)Jan-Dec 2) 854 3) 201m & 84F 4)Sinhala, Tamil and English (after second year) 5)Three students have been accepted from Guyana.

Relevant departments — Anatomy - Physiology - Biochemistry - Microbiology - Parasitology - Public health & preventive medicine - Pathology - Forensic medicine - Pharmacology - Medicine - Surgery - Paediatrics - Psychiatry - Obstetrics & gynaecology.

Courses — *** MEDICINE
First degree course of four years and eight months for bachelor of medicine and bachelor of surgery (MBBS).
Entry depends on aggregate of marks obtained at GCE 'A' level.

SRL 8 **UNIVERSITY OF PERADENIYA**

Enquiries: The Registrar, University of Peradeniya, Augusta Road, Peradeniya.

Managing agency: University Grants Commission and Ministry of Higher Education

General details: 1)From Oct 2)c.300 3)Some 4)Sinhala, Tamil and English in Medical School, and Swabasha and English in Dental School 5)Students from other countries (UK, USA, W. Germany) have been accepted in Medical School as elective clinical students only.

Relevant departments: Medical School: Anatomy - Biochemistry - Physiology - Pharmacology - Pathology - Forensic medicine - Parasitology - Microbiology - Community Medicine - Medicine - Surgery - Obstetrics & gynaecology - Psychiatry.
Dental School: Conservation - Oral surgery - Oral medicine - Orthodontics - Paedodontics - Periodontology - Prosthetics - Oral pathology.

Courses:

** DENTAL NURSING
2-year certificate course for dental nurse.
GCE 'O' level with science.

** DENTAL TECHNOLOGY
2-year certificate course for dental technicians, to train personnel for the Dental School, the army and air force, and the Ministry of Health.
GCE 'O' level with science.

*** FIRST DEGREES
3-year degree course for bachelor of dental surgery; 5 years for bachelor of medicine and surgery.
GCE 'O' level, and approval by Ministry of Higher Education.

Note: The Dental School has links with the Royal Dental College, Aarhus, Denmark, and receives some WHO aid for the training of staff.

SRL 9 **UNIVERSITY OF VIDYODAYA**

Enquiries: Registrar, University of Vidyodaya, Gangodawila, Nugegoda.

General details: 1)From Oct 2) 1,863 (all faculties) 3)Some 4)Sinhala and Tamil

Relevant department: Biological sciences

Courses:

*** FIRST DEGREES
First degree courses include 4-year course in biological sciences.
GCE 'O' level.

**** HIGHER DEGREES/DIPLOMA
1-year master's level course in biological sciences; also 6-term diploma courses in food science or optometry.
Relevant first degree

Swaziland

In Swaziland, the population does not live in villages, as elsewhere in Africa. The people are distributed sparsely throughout the entire country with their agricultural fields around them, which may at times place two neighbouring families as far as a kilometre apart.

Primary health care is delivered by means of rural health clinics, each serving a radius of about 10 kilometres. Each rural health clinic is staffed by two state registered nurses with midwifery training, and other supporting auxiliary personnel. Thus integrated curative and preventive and maternity services are made available to individuals and families in the community.

Rural health motivators training was started in 1976. These aides are chosen by the community, trained by the preventive and first aid service and other services related to the community development for eight weeks. Their objectives are to encourage the community to take care of its own health by living healthy lives, and to persuade those living furthest from the rural health clinic to use the preventive as well as curative services. Each motivator is responsible for 40-50 families, giving first aid treatment in emergencies, supervising domiciliary treatment, imparting health and nutrition education, assisting in toilet construction and potable water supply, and motivating mothers and children to take advantage of MCH/FP and nutrition services. In this way some form of essential health care is delivered to each family by people who understand and share the problems of the community.

For many the rural health motivator is the first line of contact with the health system; where necessary the motivator will refer a patient to the rural health clinic in his or her area, where the clinic nurse will supervise the patient, and may refer him to the nearest district hospital. In turn the district hospital doctors visit the clinics on a fortnightly basis for follow-up of discharged patients, supervision and administrative matters of the clinic.

SWA 1 **INSTITUTE OF HEALTH SCIENCES, FACULTY OF NURSING**

Enquiries — Director, Institute of Health Sciences, P.O. Box 8, Mbabane.

Managing agency — Ministry of Health

General details — 1)Varies 2)c.30 4)English 5)No students from other countries have so far been accepted, but this is not ruled out.

Relevant departments — Nursing education - Health inspector education.

Courses

** HEALTH INSPECTION
3-year basic programme for health inspector.
GCE 'O' level in maths, English, biology, chemistry and physics.

** NURSING
3-year basic programme in general nursing, for Registered nurse.
GCE 'O' level with maths, English, biology, chemistry and physics.

*** MIDWIFERY/CHILD HEALTH/FAMILY PLANNING
6-month courses in midwifery and in maternal & child health/family planning.
Registered nurses.

(Continued)

Note — The Institute is supported by the USAID in terms of the physical structure, equipment (hardware), two technical assistants over a five-year period, and the training of staff for the faculty of nursing. WHO supports the health inspectors programme by providing two staff members.

The Institute hopes to expand to accommodate training of all categories of paramedicals as needs arise and resources become available.

SWA 2 SWAZILAND COLLEGE OF TECHNOLOGY

Enquiries — Principal, Swaziland College of Technology, P.O. Box 69, Mbabane. Tel: Mbabane 42681/2/3.

Managing agency — Government of Swaziland.

General details — 1)Jan-Dec 2) 600 3) 400+m & 130f 4)English 5)About 30 students are accepted annually from east, central and southern Africa.

Courses — ** MEDICAL MAINTENANCE TECHNOLOGY
2-year certificate course for medical maintenance technician, to provide hospital staff for the maintenance of hospital equipment.
'O' levels with craft technical course.

Note — The College receives support from ILO, the Commonwealth Fund for Technical Co-operation, and British Technical Aid.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Tanzania

In Tanzania, with the proportion of doctors to population only about one to 19,000, the responsibility for primary health care rests to a very large extent on paramedical workers. There is a long tradition of rural health care in Tanzania - based historically on dispensaries set up in some of the larger villages by Christian missionaries in response to need - and this tradition has been extended by deliberate planning to serve the country's predominantly rural population. Now some 2,000 dispensaries (around one for every four villages) ensure that 80 per cent of the population are within 10 km of a medical facility.

Rural dispensaries are staffed usually by a rural medical aid (RMA), with one or two helpers; where possible there is also a nurse/midwife or maternal child health (MCH) aid, so that a MCH clinic can be conducted daily. The RMA has received a 3-year course of training in anatomy, physiology and hygiene, with good grounding in diagnostic methods and in treating common diseases, including tuberculosis and leprosy; the nurse/midwife or MCH aid will deal with deliveries, give prophylactic innoculations against TB, smallpox, tetanus, pertussis, diphtheria, polio and measles, and teach the elements of nutrition. Thus between them they can handle a wide variety of cases. Anything uncommon or difficult is referred to the nearest hospital. Pending the construction of more rural dispensaries (about 100 are built every year), their service is supplemented by village health helpers. These are mature citizens - about two from each village - with at least full primary education who, after six months' elementary training in a health centre or hospital, can give treatment to people in their homes and impart simple health education.

Behind the rural dispensaries are the rural health centres, of which there are 162 throughout the country. Theoretically these give priority to preventive measures and hygiene, but they are extensively used for the treatment of common diseases, since most are located in villages. Most health centres have a room for minor surgery, and provide 20-30 beds for maternity or other patients who are not fit to return home immediately or are awaiting admittance to a hospital. There is also an ambulance facility, sometimes in the form of a general-purpose station wagon. A health centre is run by a medical assistant (MA) - a paramedical who, with some secondary education and more elaborate teaching in diagnosis and treatment, as well as some training in minor surgery, is of a higher grade than a rural medical aid. The MA is usually assisted by one or two RMAs, a nurse/midwife with one or two MCH aids, and a health auxiliary (sanitary worker).

The district hospitals provide the regional bases for staffing and supplying all these rural units, and it is to the district hospital that any difficult or serious case is referred. There are 123 hospitals - one to every administrative district with a second in about half the districts - and, though simple and utilitarian, they provide doctors (one or more according to size), stores of drugs and equipment, a diagnostic laboratory, X-ray and operating facilities, and beds for referred patients. These hospitals are in turn supported by the three large, sophisticated consultant hospitals which serve the whole country, including Dar es Salaam with its 600,000 inhabitants.

By abolishing commercial private practice, and by ensuring that all young medical graduates are introduced to rural practice and are made to understand its essential importance, the government is giving active encouragement to Tanzania's tradition of rural health care. In addition it is exploring 'traditional medicine' and conducting research into the herbs commonly used, with the hope that this may in some way be integrated with the formal services provided. The government will continue to lay stress on preventive measures in training of doctors and paramedical workers, in pursuance of the national policy of giving priority to preventive rather than curative services, and of providing free health care. Meanwhile, acknowledgement is given to the contribution made by the missions, by local self-help schemes, by overseas aid, and by village people who make a contribution in cash or kind to the expense of providing and improving primary health care services.

TAN 1-42 **BASIC TRAINING COURSES FOR NURSING AND PARAMEDICAL PERSONNEL**

Enquiries — Ministry of Health, Dar es Salaam, or to the Principal of individual institutions at the address in the list TAN 1-42.

Managing agency — Ministry of Health unless otherwise stated in individual list of institutions.

Courses — Courses of training similar to those outlined below (a-l) take place in a number of hospitals and training institutions throughout Tanzania. Following this list of courses is an individual list of institutions (TAN 1-42), giving their location, and an indication of which of these courses take place there. Most of the institutions can offer some residential places, though not all are fully residential.

(a) * NURSING/MIDWIFERY
1-year in-service course for nursing assistants and auxiliaries, covering basic nursing care and midwifery.
Candidates working as nursing assistant or auxiliary.

(b) * LABORATORY AUXILIARY
1-year course of training as microscopist and laboratory auxiliary.
Primary school leavers.

(c) * HEALTH AUXILIARY
18-month course of training for health auxiliary.
Primary school leavers.

(d) * RURAL MEDICAL AID
3-year full-time, pre-service course for rural medical aid.
Full primary school education, or Form 4 secondary, boys only.

(e) * NURSING
3-year full-time course in nursing, to qualify candidates to be registered as trained nurses under Section B of the register.
Full primary education with at least 2 years at secondary school/ homecraft school, or employed as nursing assistant/orderly/village midwife.

(f) ** MIDWIFERY
1-year full-time course in midwifery, for the qualification of grade B registered midwife.
Grade B registered nurses.

(g) ** PSYCHIATRIC NURSING
1-year full-time course in psychiatric nursing, for the qualification of grade B registered psychiatric nurse.
Grade B registered nurse.

(h) ** NURSING
18-month course in nursing, to provide opportunity for grade B registered nurse to train for grade A registered staff nurse.
Grade B registered nurse.

(i) ** NURSING
4-year integrated pre-service course in nursing, to qualify candidates to be registered as trained staff nurses under Section A (nurse/midwife or psychiatric nurse) of the register.
National Form 4 Certificate, with passes in at least 4 subjects, including English, Ki-Swahili, biology and one other science.
Male/females, age 17+.

(j) ** MEDICAL ASSISTANT
3-year full-time, pre-service course to train school leavers as medical assistants.
National Form 4 Certificate with pass (and preferably credit) in maths, biology and chemistry.

(k) ** MEDICAL ASSISTANT
2-year course to up-grade rural medical aids to function as medical assistants.
Rural medical aids with not less than 3 years experience.

(l) *** MEDICAL ASSISTANT
2-year pre-service course to train high school leavers to become medical assistants.
Candidates with good results in National Form 6 examination in maths and science subjects.

TAN 1 **Bugando Medical Training Centre, P.O. Box 476, Mwanza.**
Courses (l).

TAN 2 **Bugando School of Nursing, P.O. Box 476, Mwanza.**
Courses (i).

TAN 3 **Bukumbi Nurses' and Midwives' Training School, P.O. Box 1798, Mwanza.**
Managing agency Diocese of Mwanza (Roman Catholic) & Ministry of Health.
Courses (e), (f).

TAN 4 **Bumbuli Medical Assistants' Training Centre, P.O. Private Bag, Soni, Lushoto District.**
Managing agency North Eastern Diocese of the Lutheran Church & Ministry of Health
Courses (j), (k).

TAN 5 **Ifakara Medical Assistants' Training Centre, P.O. Box 39, Ifakara, Morogoro Region.**
Managing agency Catholic Diocese of Mahenge, Basle Foundation of Switzerland, & Ministry of Health
Courses (j)

TAN 6 **Ilembula Nurses' and Midwives' Training School, Ilembula Hospital, P.O. Box 1, Ilembula, Iringa District.**
Managing agency Southern Synod of the Evangelical Lutheran Church of Tanzania & Ministry of Health.
Courses (e), (f).

TAN 7 **Iringa Rural Medical Aids Training Centre, P.O. Box 235, Iringa.**
Courses (d).

TAN 8 **Kabanga Nurses' Training School, P.O. Box 42, Kasulu.**
Managing agency Medical Missionaries of Mary & Ministry of Health
Courses (e).

TAN 9 **Kagemu Rural Medical Aids Training Centre, P.O. Box 62, Bukoba.**
Courses (d).

TAN 10 **Kibaha Rural Medical Aids Training Centre, P.O. Box 30041, Kibaha, Dar es Salaam.**
Courses (d).

TAN 11 **Kigoma Rural Medical Aids Training Centre, P.O. Box 16, Kigoma**
Courses (d).

TAN 12 **Kilimanjaro Christian Medical Centre and School of Nursing, P.O. Box 3012, Moshi.**
Managing agency Good Samaritan Foundation & Ministry of Health
Courses (b), (i).

TAN 13 **Kilimatinde Nurses' and Midwives' Training School, P.O. Box 501, Manyoni.**
Managing agency Anglican Church & Ministry of Health
Courses (e), (f). Also (b), but course conducted at Kilimatinde Hospital.

TAN 14 **Kilosa Rural Medical Aids Training Centre, P.O. Box 150, Kilosa.**
Courses (d).

TAN 15 **Kiomboi Nurses' and Midwives' Training School, P.O. Kioboi.**
Courses (e), (f).

TAN 16 **Kolandoto Nurses' and Midwives' Training School, P.O. Box 46, Shinyanga.**
Managing agency African Inland Mission & Ministry of Health
Courses (e). (f).

TAN 17 **Machame Medical Assistants Training Centre, P.O. Box 3044, Moshi.**
Managing agency Northern Diocese of Lutheran Church & Ministry of Health
Courses (j).

TAN 18 **Magila Nurses' and Midwives' Training School, P.O. Box 5, Muheza, Tanga.**
Managing agency Anglican Church & Ministry of Health
Courses (e), (f).

TAN 19 **Makiungu Midwives' Training School, P.O. Private Bag, Singida.**
Managing agency Diocese of Singida (Catholic) & Ministry of Health
Courses (f).

TAN 20 **Mbozi Rural Medical Aids Training Centre, P.O. Box 2, Mbozi.**
Courses (d).

TAN 21 **Mirembe Psychiatric School of Nursing, P.O. Box 595, Dodoma.**
Courses (g)

TAN 22 **Mkomaindo Nurses' and Midwives' Training School, P.O. Box 146, Masasi.**
Courses (e), (f).

TAN 23 **Mkomaindo Rural Medical Aids Training Centre, P.O. Box 146, Msasi.**
Courses (d).

TAN 24 **Muhimbili School of Nursing, Muhimbili Hospital, P.O. Box 21468, Dar es Salaam.**
Courses (a), (h), (i).

TAN 25 **Mvumi Nurses'/Midwives' Training School, P.O. Dodoma.**
Details of courses run here are not available.

TAN 26 **Mvumi Rural Medical Aids Training Centre, Mvumi Hospital, P.O. Donoma.**
Managing agency Anglican Church & Ministry of Health
Courses (b), (d).

TAN 27 **Ndanda Nurses' and Midwives' Training School, St Benedict's Hospital, P.O. Box 1016, Ndanda.**
Managing agency Catholic Diocese of Ndanda & Ministry of Health
Courses (e),)f).

TAN 28 **Ndareda Nurses' Training School, P.O. Box 3124, Arusha.**
Managing agency Medical Missionaries of Mary & Ministry of Health
Courses (e).

TAN 29 **Ndolage Nurses' and Midwives' Training School, P.O. Box 1034, Kamachumu, Bukoba.**
Managing agency Evangelical Lutheran Church & Ministry of Health
Courses (e), (f).

TAN 30 **Newala Midwives' Training School, P.O. Box 91, Newala.**
Courses (f).

TAN 31 **Nkinga Nurses' Training School, P.O. Box 67, Nzega, Nzega District.**
Managing agency Swedish Free Mission & Ministry of Health
Courses (a) for village midwives, (e).

TAN 32 **Pangani Rural Medical Aids Training Centre, P.O. Box 87, Pangani.**
Courses (d).

TAN 33 **Peramiho Nurses' and Midwives' Training School, P.O. Box 57, Peramiho, Ruvuma Region**
Managing agency Diocese of Songea (Roman Catholic) & Ministry of Health
Courses (e), (f).

TAN 34 **Rubya Nurses' and Midwives' Training School, P.O. Private Bag, Bukoba.**
Managing agency Roman Catholic Diocese of Bukoba & Ministry of Health
Courses (e), (f).

TAN 35 **Sayusayu Rural Medical Aids Training Centre, P.O. Box 309, Maswa.**
Courses (d).

TAN 36 **Sengerema Nurses' and Midwives' Training School, P.O. Box 1, Sengerema, Mwanza.**
Managing agency Roman Catholic Diocese of Mwanza & Ministry of Health
Courses (e), (f).

TAN 37 **Sengerema Rural Medical Aids Training Centre, P.O. Box 1, Sengerema, Mwanza.**
Managing agency Roman Catholic Diocese of Mwanza & Ministry of Health
Courses (d).

TAN 38 **Shirati Nurses' and Midwives' Training School, P.O. Private Bag, Musoma.**
Managing agency Mennonite Church & Ministry of Health
Courses (e), (f).

TAN 39 **Songea Rural Medical Aids Training Centre, P.O. Box 159, Matogoro, Songea District.**
Courses (d).

TAN 40 **Sumve Nurses' and Midwives' Training School, P.O. Mantare, Mwanza.**
Managing agency Diocese of Mwanza & Ministry of Health
Courses (e), (f).

TAN 41 **Tanga Nurses' Training Centre, Bombo Hospital, P.O. Box 5024, Tanga.**
Courses (e).

TAN 42 **Tanga Medical Training Centre, P.O. Box 5030, Tanga.**
Courses (c), (j).

TAN 43 **UNIVERSITY OF DAR ES SALAAM**

Associated institution **Muhimbili Medical Centre (incorporating the Faculty of Medicine, University of Dar es Salaam)**

Enquiries Director-General, Muhimbili Medical Centre, P.O. Box 20500, Dar es Salaam. Tel: 26211; telegram: MUHIMBILI

General details 1)Jul-May in 4 terms 2) 1,060 3) 600m & 400f 4)English 5)About 10 students from Lesotho, Zambia, India and Zimbabwe are accepted annually.

Selected courses ** DENTISTRY
3-year certificate course in dental practice, for dental assistants;
3-year certificate course in dental technology.
School Certificate 'O' level with 6 credit passes.

** ENVIRONMENTAL HEALTH
3-year diploma course in environmental health, for health officers.
As for Dentistry course, above.

** MEDICAL LABORATORY TECHNOLOGY
3-year basic technician's course in medical laboratory technology; this may be followed by 2-year post-basic diploma course.
As for Dentistry course, above.

** NURSING/NURSE TEACHING/PUBLIC HEALTH NURSING
3-4 year certificate course in basic nursing; this may be followed by 1-year post-basic course for nurse teachers, or in public health nursing.
As for Dentistry course, above.

** PHARMACY
3-year certificate course in pharmacy, for pharmaceutical assistants.
As for Dentistry course, above.

** RADIOGRAPHY
3-year certificate course in radiography
As for Dentistry course, above.

*** FIRST DEGREES
3 years for first degree in pharmacy; 5 years for medical practitioner (MD).
Minimum of 2 'A' levels, in physics, chemistry, biology or maths.

**** DIPLOMA
1-year postgraduate diploma course in public health.
Qualified medical practitioners.

**** MASTER'S LEVEL
3 years for MMed, with specializations in medicine and surgery, in obstetrics & gynaecology, in pathology, or in public health, anaesthesia and ophthalmology.
MD with at least 2 years experience after internship.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Tonga

Tonga does not as yet have a primary health care programme in the true sense of the term, i.e. one which is community based with strong community participation. However the existing primary health care programme is delivered through the three hospitals and the seven rural dispensaries.

All hospitals and dispensaries provide outpatient consultative services and treatment. Domestic visits are carried out by the medical staff of the rural dispensaries on request. The rural dispensaries are staffed mostly by medical assistants. However, most of their work is carried out within the dispensaries - thus the people go to the dispensaries in order to get attention and treatment.

The next group of health workers - and these are the workers at the grass roots level at present - are the public health nurses. They are based at maternal and child health clinics. Each nurse has seven to ten villages under her care. She visits each village in her area at least twice a month. She provides well-baby clinics, nutritional education and advice, instructions on sanitation and hygiene, motivation of family planning, and simple treatments. She works in conjuction with village women's committees. She also provides school health service if there is a primary school in her area. Any problems she cannot deal with are referred to the nearest rural dispensary or hospital.

There is hope that primary health care in the community will be developed from the existing system and by utilizing selected members of the village women committees for training, so that they can carry out the primary health care programme in the community and be responsible to the public health nurse.

TON 1 QUEEN SALOTE SCHOOL OF NURSING

Enquiries Chief Tutor Sister, c/o P.O. Box 59, Nuku'alofa. Telegram: Minhealth, Tonga.

Managing agency Ministry of Health

General details 1)From March 2)c.75 3) 105f 4)English and Tongan 5)No students from other coutries have so far been accepted, as training facilities are only just adequate for Tongan requirements.

Course ** NURSING
3-year course in general nursing, comprising about 32 weeks theory, and the rest in-service training in clinical areas of hospitals and public health centres.
Minimum: Tonga Higher Leaving Certificate, age 17 years.

Trinidad and Tobago

In the Community Health Services Programme in Trinidad and Tobago efforts are being made to improve primary health care and establish this as one of the most important components of the health system. The main aims are to emphasise the promotive and preventive aspects of health care and provide adequate staff and facilities to meet curative needs; to provide a basic health service that is both acceptable and accessible to all the people; and to give more attention to rehabilitative aspects of care at the primary level.

Community Health Services are regionalized along county lines and attention is being given to building up health teams in each county to include medical, dental and nursing personnel, public health inspectors, social workers, administrators, pharmacists, health educators, nutritionists, and a wide range of supporting staff. These teams, under the direction of a county medical officer of health, assist in planning and developing county health services, and are responsible for implementing programmes in the counties. At present, county teams are incomplete because of shortages of trained staff.

Trinidad and Tobago has a network of 102 health centres and six maternity units strategically placed throughout the country to provide basic health services. There are also two general hospitals, three county hospitals, and six district hospitals, which provide out-patient and ambulatory care in addition to in-patient service. A community mental health programme is being implemented and there are also specialized services available in areas such as venereal disease control, leprosy and tuberculosis. Family planning services are offered in 77 government clinics, and in 54 of these family planning is integrated with maternal and child health services. Additional family planning service is provided through the Family Planning Association and the Catholic Marriage Advisory Council.

Provision of new health centres and maternity units, and reconstruction of existing ones, has been progressing since 1971 with the help of a World Bank loan and assistance from the IADB. Further assistance is now being sought from IADB to improve county and district hospitals in order to provide a wider range of services at primary levels, and to upgrade the quality of care in peripheral hospitals. A new hospital is to be constructed at Mount Hope and this will be part of a complex of health services, training and research facilities, which will include a medical school. All of these improved and new facilities are significant in primary health care programmes as they will help to extend and improve out-patient and ambulatory care in addition to providing better in-patient services.

TRI 1 **DENTAL NURSES TRAINING SCHOOL**

Enquiries: Principal, Dental Nurses Training School, 19 Richmond Street, Port-of-Spain. Tel: 62-31014

Managing agency: Ministry of Health, with PAHO/WHO and UNDP

General details: 1)Sep-Jul in 3 terms 2) 35 3)None 4)English 5) 10 students per annum are accepted from Commonwealth Caribbean countries.

Courses:

** DENTAL NURSING
2-year Certificate course in dental nursing, to provide increased dental care to children aged 2½-12 years.
Minimum GCE 'O' level in 5 subjects, including English, a science subject and preferably maths.

Note: A training course for dental surgery assistants is being considered.

TRI 2 **PARAMEDICAL AND NURSING TRAINING COURSES**

Enquiries

Chief Personnel Officer, Central Training Unit, 20 Queens Park West, Port-of-Spain. Tel: 62-22237; or to the Hospital Medical Director of the hospitals listed below.

Nursing Training in Trinidad and Tobago is organized at three government hospitals in Trinidad - General Hospital, Port-of-Spain; General Hospital, San Fernando; and St Ann's Psychiatric Hospital. Courses for paramedical personnel are run by the Ministry of Health in conjunction with the University of the West Indies Extra-Mural Department and the Central Training Unit. An outline of current courses is given below.

Courses

* NURSING
2-year course in general nursing, for assistant nurse.
Primary school leaving certificate or, preferably, GCE 'O' level passes in 2 subjects- age 18-44.

** NURSING
3-year course in general nursing, leading to qualification of Registered Nurse.
GCE 'O' level in 5 subjects including English and maths or a science subject.

** PSYCHIATRIC NURSING
3-year course in psychiatric nursing, for the qualification of Registered Psychiatric Nurse.
As for Registered Nurse course, above.

** MIDWIFERY
2-year course in midwifery covering anatomy, physiology, the new-born, labour, the puerperium, and family planning.
As for Registered Nurse course, above.

** PHARMACY
3-year course in pharmacy, covering pharmaceutical chemistry, pharmaceutics, physiology, pharmacology and forensic pharmacy.
GCE in 5 subjects including physics, biology, maths, English language and chemistry (which must be at 'A' level).

** MEDICAL LABORATORY TECHNOLOGY
3-year in-service course in medical laboratory technology.
GCE 'O' level in 5 subjects, one of which must be chemistry, and 1 year's experience in a laboratory.

*** MIDWIFERY
1-year post-basic course in midwifery.
Registered Nurses.

Note

Other courses are organized, such as 1 year for Medical records keeping (entry: 5 GCE 'O' levels) and for Public health inspector, and 3-month courses in Intensive care and Haemodialysis at the General Hospital in Port-of-Spain, for registered nurses with suitable experience.

Courses in occupational therapy and physical therapy are being considered.

See also TRI 1 for dental nurse training.

TRI 3 **UNIVERSITY OF THE WEST INDIES - ST AUGUSTINE CAMPUS**

Enquiries — Sub-Dean, University of the West Indies, Medical Faculty, General Hospital, Charlotte Street, Port-of-Spain.

Note — The Medical Faculty of the University of the West Indies is based on the Mona Campus in Jamaica (see JAM 8). Training in the clinical years is shared between the campuses in Jamaica, Trinidad and Barbados. In Trinidad this takes place at the General Hospital, Port-of-Spain.

The University plans to develop full medical training in the Eastern Caribbean under the Eastern Caribbean medical scheme.

See also TRI 2 for courses run in conjunction with the UWI Extra-Mural Department. The Extra-Mural Department also offers postgraduate courses in specialized subjects as need arises.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.

Tuvalu

In Tuvalu, at the village level, the maternal and child health aides assist the district nurses in providing primary health care to the people. Their duties include the care of infants and children, the care of pregnant mothers, family planning, and the treatment of minor illnesses. More severely ill patients are referred to the district (Island) hospital or to the Base hospital. There are eight islands in Tuvalu, and each island is provided with a district nurse and a maternal and child health (MCH) aide. The MCH aides are also trained to carry out normal deliveries.

The traditional birth attendants, healers and bone-setters are still practising their trade but to a lesser degree. The majority of the people are going to the westernized trained health personnel for treatment. Any complications that may arise from cases under the care of traditional birth attendants, traditional healers and traditional bone-setters are usually referred to the hospital.

At present there is no institution in Tuvalu for the training of any category of health service personnel.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Uganda

Primary health care services in Uganda have been developed as a component of successive five-year development plans, with increasing stress being laid on preventive care.

The second five-year plan (1966-71) contained a commitment to the creation of one health centre per Gombolola (sub-county) to serve a population of 6,000 to 20,000. While this target has not been fully achieved it remains as the long-term aim. The third five-year development plan (1971-76) had as its main theme prevention of diseases, better health care facilities and health promotion. An important statutory step was taken with the introduction of compulsory birth, death and marriage registrations. Family planning became officially accepted by the government. During this period a province became medically under the adminsitration of a Commissioner. Responsibility for setting up and administering health centres and all other rural medical units was transferred from the local authorities to the Ministry of Health.

The third plan also saw a new trend of looking at nutrition as warranting special considerations. New nutritional rehabilitation centres were established and the introduction of nutritional scouts at Kayunga (near Kampala) and Ibanda (in western Uganda) was a new approach to tackling diseases at their root cause. The nutritional scouts are primary school-leavers, trained in their home villages in elementary principles of nutrition, causes and simple signs of malnutrition and its prevention and that of other common diseases usually associated with poor nutrition.

The establishment of the department of preventive medicines (now the Institute of Public Health) at Makerere University as long ago as 1953 has had considerable influence on the development of primary health care services. In 1959 the university established the Kasangati Health Centre for the teaching of community medicine as well as a model health centre. In 1971 the Institute of Public Health co-operated in the establishment of a sister health centre at Wakiso with aid from the USA. Most of the guiding principles originated from Kasangati, but with family health as the theme and special emphasis on family planning. The project had to be suspended in 1973 with the withdrawal of the sponsors but plans are being made for its revival.

New avenues were sought for simpler but effective health units or systems which could cater for the ninety per cent of population who live in rural areas. A seminar on primary health care, organized in 1976 by the Ministry of Health with the assistance of the WHO and UNICEF, recommended that the major public health problems of the country could only be tackled more effectively by a simpler type of health personnel in the form of primary health workers, who should come from amongst the people and live with them. Their main health care function should be preventive in nature. As a pilot project a WHO consultant organized a brief course for the Kayunga nutrition scouts on primary health care techniques with the aim of converting them into primary health workers. A draft manual was also prepared at the end of the course.

In late 1975 Kampala City Council together with the Institute of Public Health embarked on a health care service using a mobile MCH team in a slum area of the city (Makerere-Wivulu) aimed at the high-risk groups. UNICEF indicated its willingness to provide limited assistance for training primary health workers suitable for such an area. Arrangements are under way to extend such experimental services to other slum areas.

Measures taken over the years indicate a major shift in the health-care delivery system, from the traditional approach of investigating and treating the individual patient, to that of looking at a patient and his total environment including the community where he lives. Its implementation is not the responsibility of the physician alone but of team-work in which sociologists, health educators, health visitors, public health engineers, administrators and others all play important roles.

UGA 1-8 **AUXILIARY NURSE TRAINING**

Enquiries — Ministry of Health, P.O. Box 8, Entebbe. Or to Principal of individual institution.

Courses — There are eight training schools (UGA 1-8) offering courses of training for enrolled nurse and enrolled midwife throughout Uganda. An outline of the courses is given below, and the addresses of the individual institutions follow.

* NURSING
2½-year course for enrolled nurse, covering the basis of surgery, medicine, gynaecology, children's diseases, infections diseases and nursing procedures.
Three to four years secondary education, age 17+.

** MIDWIFERY
2½-year course for enrolled midwife, to provide staff to take charge of maternity centres and clinics.
Three to four years of secondary education, aged 17+.

UGA 1 **Arua Nurses/Midwives Training School, P.O. Box 3, Arua.**

UGA 2 **Gulu Nurses/Midwives Training School, P.O. Box 160, Gulu.**

UGA 3 **Jinja Nurses/Midwives Training School, P.O. Box 43, Jinja** (See Note).

UGA 4 **Kabala Nurses/Midwives Training School, P.O. Box 7, Kabala.**

UGA 5 **Lira Nurses Training School, P.O. Box 2, Lira.** (Enrolled Nurses course only.)

UGA 6 **Masaka Nurses/Midwives Training School, P.O. Box 18, Masaka.**

UGA 7 **Mbarara Nurses/Midwives Training School, P.O. Box 40, Mbarara.** (See Note).

UGA 8 **Soroti Nurses/Midwives Training School, P.O. Box 289, Soroti.**

Note — There is also a course in paediatric nursing at Jinja Hospital, and a course for assistant health visitors at Mbarara.

UGA 9 **BUTABIKA NURSES' TRAINING SCHOOL**

Enquiries — Principal, Butabika Nurses' Training School, P.O. Box 7071, Kampala.

Managing agency — Ministry of Health

Courses — * PSYCHIATRIC NURSING
2½-year course for enrolled psychiatric nurse.
Three to four years of secondary education.

** PSYCHIATRIC NURSING
3½-year course of training leading to qualification of Registered Psychiatric Nurse.
School Certificate.

UGA 10 **ENTEBBE ASSISTANT HEALTH VISITORS SCHOOL**

Enquiries — Principal Tutor, Entebbe Assistant Health Visitors School, P.O. Box 8, Entebbe.

Managing agency — Ministry of Health

Course — ** HEALTH VISITING
Course for assistant health visitor; precise details not currently available.

Note — See also UGA 7 for similar course.

UGA 11 **HEALTH VISITOR'S COLLEGE**

Enquiries — Principal, Health Visitor's College, P.O. Box 5225, Kampala. Tel: 45255.

Managing agency — Ministry of Health

General details — 1)Jan-Dec 2) 20 3) 7f 4)English 5)No students from other countries have so far been accepted, but this is not ruled out.

Courses — *** HEALTH VISITOR
1-year course for health visitor certificate, to prepare officers to be in charge of provinces and district community health programmes, as well as nursing services in the rural units.
Registered nurse or registered midwife with 3 years' post registration experience; those with community nursing experience preferred.

Note — The course is offered in co-operation with the Institute of Public Health, Makerere University, Kampala.

UGA 12 **INSTITUTE OF PUBLIC ADMINISTRATION**

Enquiries — Tutor-in-Charge, Nursing Administration, Institute of Public Administration, P.O. Box 20131, Kampala.

Managing agency — Ministry of Health

Course — *** NURSING ADMINISTRATION
Course in nursing administration; precise details not currently available.

UGA 13 **MAKERERE UNIVERSITY**

Enquiries — Dean, Faculty of Medicine, or Registrar, Makerere University, P.O. Box 7062, Kampala. Tel: 42471; telegram: Makunika Kampala.

General details — 1)Jul-May in 4 terms for medicine 2) 3,721 (100 for medicine) 3) 3,000 4)English 5)Students have been accepted from other African countries, and from Bangladesh, India, Sri Lanka, Korea and China.

Relevant faculty — Medicine

Relevant departments — Anaesthetics, Anatomy, Institute of Public Health, Medicine, Microbiology, Obstetrics & Gynaecology, Paediatrics, Pathology, Physiology, Surgery, Orthopaedics, Regional Teacher Training Centre.

Psychiatry, Pharmacology, Radiology, Biochemistry.

Selected courses

*** FIRST DEGREES
3-year first degree courses in anatomy, biochemistry, physiology; 5 years for medicine and surgery.
General requirements are 5 subjects in SC or GCE 'O' level and 'A' level passes in two of biology or zoology, chemistry, physics.

**** MASTER'S LEVEL and DOCTORAL STUDIES
3-year master's degree courses in internal medicine, surgery, obstetrics, gynaecology, paediatrics, psychiatry, pathology, ophthalmology, otorhinolaryngology and public health.

**** DIPLOMA COURSES
9-month postgraduate diploma course in obstetrics; child health, tropical paediatrics and public health.

Note

The Faculty of Medicine is a founder member of the Association of Medical schools in Africa, which is a founder member of the World Federation for Medical Education. It receives assistance from the World Health Organization and may foundations.

UGA 14 MEDICAL ASSISTANTS' TRAINING SCHOOL, MBALE

Enquiries

Principal Tutor, Medical Assistants' Training School, P.O. Box 221, Mbale.

Managing agency

Ministry of Health

General details

1)Jul-Dec, Jan-Jun 2) 150 3) 120m 4)English 5)No students have so far been accepted from other countries.

Courses

** MEDICAL ASSISTANT
3-year diploma course for medical assistant, to provide paramedical staff to run health centres and dispensaries, and outpatient departments in hospitals.
East African School Certificate 'O' level with credits in science subjects and English.

*** MIDWIFERY
2-month refresher course in midwifery, to raise the professional standard of those working in private hospitals or maternity centres.
Midwifery certificate with some years experience.

Note

Medical assistant training is also available at Fort Portal Medical Assistants' Training School, P.O. Box 10, Fort Portal.

UGA 15 MEDICAL LABORATORY ASSISTANT TRAINING SCHOOL, JINJA

Enquiries

Principal, Medical Laboratory Assistant Training School, P.O. Box 1339, Jinja. Tel: 21984 Jinja; telegram: Anopheles Jinja.

Managing agency

Ministry of Health

General details

1)Jan-Oct 2) 30 3) 10 (rooms) 4)English 5)No students from other countries have so far been accepted, but this is not ruled out.

Courses

* LABORATORY ASSISTANT
9-month course for laboratory assistant (U8 scale), leading to certificate; to provide trained hospital personnel for health service.
Minimum 2 years secondary education, age 14-18 years; or 2 years approved hospital or health centre laboratory service.

UGA 16 **MULAGO HOSPITAL**

Enquiries — Tutor-in-Charge, Nursing (or Radiography/Dispensing, etc) Training, Mulago Hospital, P.O. Box 7051, Kampala.

Managing agency — Ministry of Health

Courses — The following courses of training are available at Mulago Hospital but precise details of length and content, and the exact level of entry, are not currently available.

** NURSING
Course leading to qualification of Registered Nurse.

** MIDWIFERY

Course leading to qualification of Registered Midwife.

** DENTAL NURSING
Course for public health dental assistant.

** DISPENSING
Course in dispensing.

** LABORATORY TECHNOLOGY
Courses for laboratory technician, and for laboratory technologist.

** RADIOGRAPHY
Course for radiographer.

** PHYSIOTHERAPY
Course for physiotherapist.

** ANAESTHETICS
Course for anaesthetic assistant.

** ORTHOPAEDICS
Course for orthopaedic assistant.

** PAEDIATRICS
Course in paediatric nursing.

*** NURSE/MIDWIFERY TEACHING
Courses for nurse tutor and midwifery tutor.

Note — Courses for laboratory technologist and laboratory technician are also available at Kyambogo Hospital, P.O. Box 20012, Kampala.

UGA 17 **SCHOOL OF HYGIENE, MBALE**

Enquiries — Principal, School of Hygiene, P.O. Box 221, Mbale. Tel: 2756; telegram: Hygiene.

Managing agency — Ministry of Health

General details — 1)Jul-Sep, Oct-Dec, Feb-May 2) 120 3) 120m 4)English 5)No students from other countries have so far been accepted, but this is not ruled out.

Courses — * ENVIRONMENTAL HEALTH SCIENCE
2-year certificate course in environmental health science.
Senior III or IV, age at least 18 years.

** ENVIRONMENTAL HEALTH SCIENCE
3-year diploma course in enviromental health science.
East African Certificate of Education, with credits in maths, and two science subjects (other than health science), and a pass in English language.

Note — The School has links with Makerere University, which examines and awards the diplomas. There is occasional support in terms of educational resources and equipment from UNICEF.

UGA 18 — **VECTOR CONTROL DIVISION**

Enquiries — Director, Vector Control Division, P.O. Box 1661, Kampala.

Managing agency — Ministry of Health

Course — * HEALTH ASSISTANT
Course for field assistant (entomology); precise details not currently available.

Details of courses under subject heading are arranged in ascending order of level of entry qualifications, identified by one, two, three or four stars as follows:

* Junior or leaving certificate or some relevant experience;

** GCE 'O' level or equivalent or relevant experience;

*** GCE 'A' level or equivalent or basic qualification, eg. Registered nurse.

**** First degree and certain other qualifications, eg. Registered Nurse/ Registered Midwife, or considerable relevant experience.

Western Samoa

In essence Western Samoa's primary health care system is a socialized one, in which the patient pays a small fee for service and medicines, and in which the cost of the system is otherwise fully paid by the Government through taxation. Under the control of the Department of Health, health care is delivered to the population through a system of district health services. Patients are seen in district hospitals as in-patients and out-patients; and maternal and child health and family planning services are delivered through district nurses. Special disease conditions such as tuberculosis, leprosy and filariasis are dealt with through specialized units.

The traditional pattern of life of Samoan communities depends to a large extent upon communal participation, and the provision of health services is no exception. In particular Women's Committees are extensively involved in promoting and providing health care at the village level. Simple medical care is provided through trained primary health care workers and natal care through trained traditional birth attendants, who receive remuneration in a traditional manner. These two categories of health worker have only been trained in recent years in an on-going programme.

There is a problem, although it is not an overwhelming one, of lack of adequate nutrition. Extensive nutrition education is conducted by nutrition staff within the Health Department. Health personnel participate in education sessions and they in turn are responsible for educating the public. Nutrition staff also work directly with the public, using various methods such as radio, newspapers, pamphlets, public discussion, lectures and demonstration.

Nursing training is provided through the Apia School of Nursing, a section of the Department of Health, and most nurses receive their training in Samoa. A few receive their training in New Zealand and on their return are in line for supervisory positions. Medical officers and specialized paramedical staff receive their training abroad.

WES 1 **APIA SCHOOL OF NURSING**

Enquiries — Department of Health, Government of Western Samoa, Apia.

Courses — ** NURSING
3½-year course in general nursing and midwifery, leading to the Western Samoa Registered Nurse and Midwifery certificate.

Zambia

Primary health care in Zambia is delivered through a network of hospitals and health centres covering the country. The Government's aim is to increase the number of health centres, particularly in rural areas, so that by 1980 everyone will be within reasonable walking distance of a centre or sub-centre.

There are 80 hospitals. The three central hospitals are in Lusaka, Kitwe and Ndola, and there are nine general hospitals and a number of district hospitals throughout the country, all of which provide out-patient as well as in-patient treatment. There are more than 1,000 child clinics and more than 500 maternity clinics. A flying doctor service operates from Ndola to serve remote clinics.

There is a leprosy hospital and a number of settlements for infectious cases. A mobile leprosy service is in operation in remote areas.

While smallpox has been virtually eradicated, there are still problems of malaria (which is endemic outside Lusaka and the Copperbelt towns), tuberculosis, sleeping sickness and bilharzia. There is a large-scale immunization programme.

In its plans, the Government lays stress on prevention. Its community development programme seeks to involve the whole population in efforts to solve local problems of hunger, poverty, ignorance and disease through organized self-help.

ZAM 1-12 **BASIC NURSING AND PRIMARY HEALTH CARE COURSES**

Enquiries — Ministry of Health, P.O. Box 205, Lusaka. (Or Principal Tutor of individual institution).

Courses — Courses of training for primary health care personnel, similar to those outlined below, take place in a number of hospitals and training institutions throughout Zambia. Following this list of courses is a list of some individual institutions, (ZAM 1-12) giving their location, and an indication of which of these courses take place there. All courses are in English and are planned for Zambian students; the acceptance of a student from another country would be a decision of the Ministry of Health.

(a) * MEDICAL LABORATORY TECHNOLOGY
2-year course for medical laboratory assistant, leading to certificate awarded by Medical Council of Zambia, to provide trained staff for all laboratory service areas in health service - both hospital and in community.
Minimum Form III, with maths, English and science. Age 18-30 years.

(b) * HEALTH ASSISTANT
2-year course in environmental health sciences and sanitation, to provide health assistants for rural health programmes.
Currently Form III, but due to be upgraded to Form V.

(c) * PSYCHIATRIC NURSING
2-year course for Zambia Enrolled Psychiatric Nurse, to provide nursing staff for psychiatric care institutions.
Minimum Form III.

(d) * NURSING
2-year course for Zambia Enrolled Nurse, to provide staff for hospitals, rural health centres, clinics, - ante-natal and mother and child health.
Minimum Form III, preferably with English, and a science subject; 17-18 years.

(e) ** MIDWIFERY
1-year course for Zambia Enrolled Midwife, to provide staff for hospitals, rural health centres, and clinics.
Zambia Enrolled Nurse.

(f) ** MEDICAL ASSISTANT
3-year course in medical and health sciences, to provide Registered Medical Assistants for rural health centres and district hospitals.
Form V, 'O' level.

(g) ** PSYCHIATRIC CARE
3-year course in mental health science and psychiatry, to provide Medical Assistants in psychiatric care institutions.
Form V, 'O' levels.

(h) ** NURSING
3-year course for Zambia Registered Nurse, to provide staff for all areas of the health service.
Cambridge 'O' level full certificate, preferably with credits in English, biology and a science, and a pass in maths.

(i) *** MIDWIFERY
1-year course for Zambian Registered Midwife Certificate.
Zambian Registered Nurse, or equivalent, with 2 years experience.

ZAM 1 **Central Hospital School of Nursing, P.O. Box 1994, Kitwe.**
Courses (h) above.

ZAM 2 **Chainama Hills Health Training Centre, P.O. Box 3191, Lusaka.**
Courses (b), (c), (f), (g) above.

ZAM 3 **Livingstone General Hospital, School of Nursing, P.O. Box 91, Livingstone.**
Courses (d) above.

ZAM 4 **Ndola Central Hospital, School of Nursing, P.A. Ndola.**
Courses (a), (h), (i) above.

ZAM 5 **Roan Antelope Hospital, Nurses Training School, P.O. Box 167, Luanshya.**
Managing agency Mining Industry
Courses (d) above.

ZAM 6 **Ronald Ross Hospital, School of Nursing, Mufulira.**
Courses (e), (h) above.

ZAM 7 **School of Nursing, P.O. Box R.W.I., Lusaka.**
Courses (d), (h) above.

ZAM 8 **School of Nursing, University Teaching Hospital, Private Bag RW 366, Lusaka.**
Courses (h) above.

ZAM 9 **Zambia Enrolled Nurse Training School, Box 147, Mongu.**
Courses (d) above.

ZAM 10 **Zambia Enrolled Nurse Training School, P.O. Box 29, Monze.**
Courses (d) above.

ZAM 11 **Zambia Enrolled Nurse Training School, P.O. Box 30, Mpika.**
Courses Courses (d), (e) above.

ZAM 12 **Zambia Enrolled Nurses Training School, Nchanga Consolidated Coppermines Ltd., Box 63, Chingola.**
Managing agency Mining Industry
Courses (d), (e) above.

ZAM 13 **EVELYN HONE COLLEGE OF APPLIED ARTS AND COMMERCE**

Enquiries Principal, Evelyn Hone College of Applied Arts and Commerce, P.O. Box 29, Lusaka. Tel: 72961; telegram: Furcol, Lusaka.

Managing agency Department of Technical Education and Vocational Training, Republic of Zambia

General details 1)Varies 2) 1.100 3) 630

Courses

** MEDICAL LABORATORY TECHNOLOGY
3-year diploma course to train technicians required in hospital laboratories and health centres, covering theoretical work and practical clinical experience.
Full Cambridge School Certificate with Passes in English, maths and a science, or GCE 'O' level equivalents.

** PHARMACY TECHNOLOGY
3-year course of training in the preparation and dispensing of medicines, and leading to diploma.
As for Medical laboratory technology, above; extra science subjects are an advantage.

** PHYSIOTHERAPY
3-year diploma course in physiotherapy, covering theory and clinical practice in selected hospitals.
As for Medical laboratory technology course, above.

** PUBLIC HEALTH INSPECTION
3-year diploma course in public health inspection, including concurrent in-service training with public health authorities.
As for Medical laboratory technology course, above.

** RADIOGRAPHY
3-year diploma course in radiography, to train personnel for X-ray departments of hospitals (see Note).
As for Medical laboratory technology course, above.

*** MEAT AND OTHER FOODS INSPECTION
6-month course for qualified health inspectors wishing to specialize in the inspection of meat and other foods.
Diploma in Public Health Inspection

Note There are plans for the establishment of a radiotherapy department in Lusaka, and suitable candidates from the radiography course above may be selected to undergo further training in this field.

ZAM 14 **NATURAL RESOURCES DEVELOPMENT COLLEGE**

Enquiries Principal, Natural Resources Development College, P.O. Box CH 99, Lusaka.

Managing agency Ministry of Lands and Agriculture

General details 1)Oct-Dec, Jan-Apr, May-Jul 2) 400 (45 only on nutrition course) 3)Yes 4)English 5) 5 students are accepted annually from neighbouring countries.

Course

** NUTRITION
3-year Diploma course in nutrition, to train personnel for hospitals, under-5 clinics and female extension work. The programme is mainly human nutrition, with some agricultural education on food sources.
Cambridge School Certificate.

ZAM 15 **UNIVERSITY OF ZAMBIA**

Enquiries

Registrar, University of Zambia, P.O. Box 2379, Lusaka. Tel: 54755; telegram: UNZA LUSAKA

General details

1)Sep-Jul in 3 terms 2) 2,605 3) 2,400 4)English 5)About 440 students from other countries are accepted annually - mainly from neighbouring countries, but also from India and UK.

Relevant departments

Anatomy - Chemistry and biochemistry; Community health - Medicine - Obstetrics & gynaecology - Paediatrics and child welfare - Pathology and microbiology - Physiological sciences - Surgery.

Selected courses

*** NURSING/PUBLIC HEALTH
2-year Diploma course in post-basic nursing; 1-year Certificate course in public health.
Basic nursing qualification, with some experience.

*** FIRST DEGREES
4-year course for first degree in human biology; 7 years for medicine/surgery.
Minimum five GCE 'O' level passes with English, maths and 2 other sciences; candidates offering 'A' level passes may be granted certain course exemptions. Mature age entry scheme exists for suitable Zambian applicants.

**** MASTER'S LEVEL
2 years for master's degree in psychology.
Appropriate first degree.

The information given under general details refers to the following:

1) academic calendar, or usual starting dates for courses;

2) the total number of students; or the number of students on the relevant courses;

3) whether residential accommodation is available;

4) the language of instruction;

5) whether students from other countries have attended or would be permitted to attend.