Accreditation Standards for the MBBS (Bachelor of Medicine and Bachelor of Surgery) Degree Program for Institutions Admitting 150 students Annually

1. Conceptual framework:

Nepal has made a significant progress in assuring quality of Medical Education which, in turn, has contributed to enhancing the quality of health care services in Nepal. The Nepal Medical Council (NMC) remains committed to learning and benefiting from the national and international experiences and best practices. The NMC believes that the valuable lessons thus learned should be incorporated in its guiding principles in order to further improve the quality of medical education in Nepal. In light of the continuing mismatch between health system needs and the responses of academic medical institutions and the rising public aspiration for better health care, it is imperative that the NMC keeps on taking appropriate measures to address the emerging challenges in the area of quality assurance in medical education. This is not just an issue of paramount importance but is also the mandate that the NMC is required to fulfill.

In line with this imperative, the NMC has prepared document to make the underlying principles of the accreditation of undergraduate medical education as objective, coherent, explicit and transparent as possible. The remaining part of this document is devoted to that very end.

The fundamental purpose of medical education is to produce high quality medical practitioners who are willing and able to meet the existing and emerging challenges of the national health care system.

In order to meet this goal all the medical colleges in Nepal should adopt the contemporary global trends and implement innovative approaches in medical

education such as SPICES[1] , PBL[2], CPC[3] etc. The MBBS curriculum should reflect the core principles advocated by the World Federation for Medical Education (WFME), International Institute of Medical Education (IIME), General Medical Council (GMC) – UK, Association of American Medical Colleges (AAMC) and the Medical Councils of SAARC Countries including Nepal Medical Council.

[1]SPICES : *S = Student Centered; P = Problem Based; I = Integrated; C = Community based; E = Electives; S = Systematic;*

[2]*PBL = Problem Based Learning*

[3]*CPC = Clinical Presentation Curriculum*

2. <u>The competencies of the MBBS Graduate</u> :

Upon completion of the MBBS program including one year of compulsory rotating internship the Medical Graduate, who is to be registered by the NMC as Medical Practitioner, must be competent to:

2.1 take relevant medical history and conduct clinical examination appropriately;

2.2 demonstrate understanding of the principles and practices of modern medicine with sound knowledge of structure and functions of human body in health and disease;

2.3 communicate with patients and their families, colleagues and other members of health care team with respect, politeness and compassion;

2.4 carry out professional responsibilities related to the individual, family, community and society at large with concern and care;

2.5 manage life threatening medical emergencies;

2.6 manage common medical problems appropriately;

2.7 recognize clinical conditions that require referral, give initial treatment and refer to appropriate health care institutions;

2.8 recognize the biological and the social determinants of health of an individual as well as the population;

2.9 plan and manage preventive, promotive and rehabilitative health programs;

2.10 function as a member of the health care team;

2.11 identify and carry out necessary medico-legal procedures;

2.12 practice the principles of medical ethics;

2.13 acquire new knowledge and skills through continuous professional development;

2.14 appraise published scientific literature critically and engage in research work; and

2.15 use medical informatics effectively.

3. Quality assurance of the MBBS Graduate:

Since safeguarding the health of the public through ensuring the proper quality assurance of the medical education is its fundamental duty, the NMC shall :

3.1 define the criteria for accreditation of undergraduate medical education program (MBBS).

3.2 execute periodic on site inspection of the medical colleges to ensure that the defined criteria referred to in 3.1 are adequately met and assess the quality of the program being implemented ; and

3.3 administer the Licensing Examination to all medical graduates from within and outside Nepal.

4. Overview of the MBBS Program:

4.1 The MBBS program consists of a minimum of four and a half year academic course followed by one year of compulsory rotating internship.

4.2 The core curriculum for the MBBS program shall be composed of Basic Medical Sciences (Human Anatomy, Physiology, Biochemistry, Microbiology, Pathology and Pharmacology) Community Medicine/Community Health Sciences, Forensic Medicine, Internal Medicine, General Surgery, Obstetrics and

Gynecology, Pediatrics, Orthopedics, Psychiatry, Dermatology, Ophthalmology, Otorhinolarynology, Anesthesiology, Radiodiagnosis, Dental Surgery, Emergency and General Practice.

4.3 The Compulsory Rotating Internship shall be of one calendar year as per the NMC guidelines. However, all medical colleges should make necessary arrangements within a period of three years (from the time this guideline comes into effect) to implement a three month long mandatory rotation in the rural health institutions in a well supervised setting conducive for teaching - learning activities.

NB: *In the case of foreign students internship can be arranged as per the requirements of their national medical councils.*

5. The Core Curriculum:

The aim of the Core curriculum is to provide a broader framework for universities/medical colleges to develop their own curriculum, defining specific learning objectives together with teaching hours in each discipline. The curriculum should be student-centered, organ system based, integrated within and between basic medical sciences and clinical subjects preferably with the use of community-based and problem-based learning methods.

The horizontal integration of basic medical science subjects should be achieved by the concurrent integrated teaching/learning of human anatomy, physiology, biochemistry, pathology, microbiology, pharmacology and community medicine/community health sciences. Vertical integration of basic medical science subjects should be acquired through early clinical exposure.

Such a curriculum should encompass the following components:

5.1 Scientific foundation of medicine:

The medical graduate must demonstrate knowledge and understanding of:

5.1.1 the normal structure and functions of the human body;

5.1.2 abnormalities in body structures and functions which occur in diseases;

5.1.3 regulation of body functions, homeostasis and biochemical aspects.

5.1.4 the human life cycle and effects of growth, development and aging upon the individual, family and community.

5.1.5 the etiology and natural history of acute illnesses and chronic diseases.

5.1.6 laboratory or other investigations that facilitate the ability to make accurate quantitative observations of biomedical phenomena and critical analysis of data;

5.1.7 symptoms and signs of diseases, investigations and diagnosis, differential diagnoses; non-pharmacological and pharmacological management of diseases;

5.1.8 management of emergencies;

5.1.9 therapeutics, adverse reactions of therapy, curative and palliative therapy;

5.1.10 disability, handicap and rehabilitation;

5.1.11 record keeping and death audit;

5.1.12 behavioral science and relationship to medical anthropology, sociology and basic psychology;

5.1.13 educational principles underlying learning and continuing medical education;

5.1.14 ethics and legal aspects in relation to practice of medicine;

5.1.15 principles of communication;

5.1.16 role of family and interrelationship and interaction with society;

5.1.17 cultural and ethnic differences about perceptions and response to illness.

5.2 Clinical Skills:

The medical graduate must be able to:

5.2.1 take relevant history from patients, their relatives or accompanying persons;

5.2.2 perform systemic physical examinations;

5.2.3 identify problems and formulate differential diagnoses on the basis of history and clinical examination;

5.2.4 advise specific investigations and interpret results;

5.2.5 make clinical decisions based on evidence and findings;

5.2.6 plan patient management;

5.2.7 carry out required practical and technical procedures;

5.2.8 institute advanced life support measures; and

5.2.9 demonstrate other core skills and competencies as required by the national health policies, e.g. for Skilled Birth Attendant.

5.3 Communication Skills:

The medical graduate should acquire core communication skills including those required in special circumstances and must be able to:

5.3.1 listen attentively to patients, their relatives or other accompanying persons;

5.3.2 explain medical concepts and conditions in simple and plain language easily understood by the lay persons, and convey information about the health problems and their management plan;

5.3.3 take consent of patients and their relatives or responsible persons whenever necessary;

5.3.4 handle complaints appropriately;

5.3.5 listen to other members of the health care team;

5.3.6 deal with bereavement and grief sympathetically;

5.3.7 be polite, kind and compassionate with patients, their relatives and others; and

5.3.8 handle special situations such as breaking bad news etc.

5.4 Population Health and Health Systems:

he medical graduate must understand her/his role in protecting and promoting the health of the whole population and be able to take appropriate action. Graduates should understand the principles of health systems organization and their economic and legislative foundations of those systems. Graduates should also have a basic understanding of the efficient and effective management of healthcare systems.

he medical graduate should be able to demonstrate:

5.4.1 knowledge of important genetic, demographic, environmental, lifestyle, social, economic, psychological, and cultural determinants of health and illness of a population as a whole;

5.4.2 knowledge of her/his role and ability to take appropriate action in disease, injury and accident prevention and protection, and maintain and promote the health of individuals, families and community;

5.4.3 knowledge of international health status, global trends in morbidity and mortality of chronic diseases of social significance, the impact of migration, trade, and environmental factors on health, and the role of international health organizations;

5.4.4 acceptance of the roles and responsibilities of other health and health-related personnel in providing healthcare to individuals, populations and communities;

5.4.5 an understanding of the need for collective responsibility for health-promoting interventions which require partnerships with the population served, and a multidisciplinary approach including healthcare professions as well as intersectoral collaborations;

5.4.6 an understanding of the basics of health systems including policies, organization, financing, cost-containment measures of

rising healthcare costs, and principles of effective management of healthcare delivery;

5.4.7 an understanding of the mechanisms that determine equity in access to healthcare, effectiveness, and quality of care;

5.4.8 use of national, regional and local surveillance data, as well as demography and epidemiology in health decisions; and

5.4.9 willingness to accept leadership when needed and as appropriate in health issues.

The medical graduate must be able to understand and apply:

5.4.9.1 demography, vital statistics, basic and applied epidemiology, basic statistics as applied to medicine, epidemiological methods, health education, environmental health, community health, needs assessment, health care planning, health care management and health economics, organizations of curative and preventive health services, health care provisions and disaster management and international health.

5.5 <u>Information Management:</u>

The medical graduate must be able to:

5.5.1 search, collect, organize and interpret health and biomedical information from different data base and sources;

5.5.2 retrieve patient –specific information from clinical data system;

5.5.3 use information and communication technology to assist in diagnostic, therapeutic and preventive measures and for surveillance and monitoring health status;

5.5.4 understand the application and limitations of information technology; and

5.5.5 maintain records of patients under her/his care for future use and medico-legal purposes.

5.6 Critical Thinking and Research:

The medical graduate must be able to possess:

5.6.1 posses the ability to critically evaluate information and use reasoning and personal judgment;

5.6.2 understand scientific research methods and their limitations; and

5.6.3 cope with uncertainty and error in decision making.

5.7 Professional values, attitudes, behaviour and ethics:

The medical graduate must possess:

5.7.1 essential elements of the medical profession including moral and ethical principles and legal responsibilities underlying the profession;

5.7.2 professional values, responsibilities, compassion, empathy, accountability, honesty and integrity;

5.7.3 recognition of good medical practice, doctor- patient relationship, patients' welfare, and respect for colleagues and other health care professionals;

5.7.4 recognition of the moral obligation to provide end-of- life care, including palliation of symptoms;

5.7.5 recognition of ethical and medical issues in patient documentation, confidentiality and ownership of intellectual property;

5.7.6 ability to plan effectively and manage efficiently one's own time and activities to cope with uncertainty and have the ability to adapt to change; and

5.7.7 personal responsibility for the care of individual patients.

6. Teaching-Learning Methodology :

While seeking assurance of the quality of medical graduates without interfering with the academic autonomy of the individual university/medical college, the Nepal Medical Council expects the

medical colleges to implement innovative teaching methodology including but not limited to:

6.1 Self- directed- learning to inculcate the habit of life – long learning;

6.2 Problem- Based- Learning;

6.3 Structured Interactive Sessions (SIS) or didactic lectures;

6.4 Ambulatory teaching in the Outpatients' departments for better exposure and understanding of commonly encountered clinical problems;

6.5 Experiential training in communication skills and medical ethics;

6.6 Acquiring certain clinical examination and procedural skills in a skill laboratory under supervision;

6.7 Maintaining log books to document the competencies acquired during practical, clinical placements and community exposures;

6.8 Promoting learning in rural community settings (Community Based Learning);

6.9 Organ-System based integrated teaching learning and early clinical and community exposures; and

6.10 Periodic review of Basic Medical Sciences in relation to relevance to common and important clinical problems.

In order to make students learn better, there must be a provision for periodic teacher trainings and monitoring of teaching/learning activities under the guidance of a Medical Education Unit/Department.

An annual calendar of operation must be developed and followed strictly.

7. Assessment of Students:

7.1 The assessment scheme for the MBBS program must match with the methods of instruction.

7.2 The learning objectives related to the knowledge, skills, attitude, behavior and professional ethics prescribed in the MBBS curriculum, need to be assessed using appropriate methods of assessment.

7.3 The specific modalities and number of formative and summative assessments including numbers of examiners shall be determined by the concerned universities/ institutions/academies.

8. Criteria for admission to the MBBS Program:

Eligibility Criteria:

To be considered eligible for selection to the MBBS program, a candidate:

8.1.1 Must have passed 10 + 2 or equivalent qualifications recognized by universities/boards with Physics, Chemistry, Biology (PCB) and having passed in each subject securing a minimum of 50% in PCB and also in aggregate.

or

Must have passed Bachelor of Science (B.Sc.) degree recognized by the Universities in Nepal with biological sciences and must have passed one of

(iii) Higher Secondary Education (Science);

(iv) 10+2 (Science);

(v) Intermediate of Science;

(vi) Or equivalent Science education with Biology, Physics, and Chemistry.

8.1.2 Must have passed in the specific Medical Entrance Examination for the university where admission to the MBBS program is sought by the candidate.

8.2. Selection of students:

8.2.1 Eligible candidates desirous of pursuing MBBS program must take the Medical Entrance Examination conducted by the

respective university and should qualify by fulfilling university criteria.

8.2.2 All students including international students must/should take and pass the Medical Entrance Examinations of the respective universities.

9. Faculty Requirement for different departments:

The role and responsibilities of faculty in running the MBBS program is considered to be of utmost importance. The numbers of faculty required in different departments have been determined in a composite way on the basis of the following:

9.1 The total number of teaching hours in each of the subjects contained in the existing MBBS curricula.

9.2 The total number of student admission annually.

9.3 In keeping with the conceptual framework of the existing MBBS curricula which stress on the integration of basic medical sciences horizontally and vertically with early clinical exposure, a 300 bed teaching hospital is mandatory at the time of starting the MBBS program for correlating basic medical sciences with clinical experiences. In order to encourage the clinical faculty (with relevant expertise and interest) to contribute towards basic science education, one clinical faculty with postgraduate MD/MS degree or equivalent qualification in clinical disciplines may be designated as a resource faculty member in the relevant basic science departments, for the next five years. They shall be counted as a full time faculty member in that basic science department only. Such a resource faculty member can be appointed by the institution in the basic science departments as necessary and appropriate.

9.4 The number of hospital beds and units in each clinical department will depend on the need of academic programs and hospital services. However, for the purpose of ensuring adequate learning

of the medical students the organization of units and beds are given in the table 3.

9.5 Since the discipline of Community Medicine/Community Health Sciences consists of various components (Biostatistics, Sociology/Behavioral Sciences, Environmental Health, Health Education, Epidemiology, Demography and Family Health) the faculty of Community Medicine/Community Health Sciences must comprise of individuals with adequate expertise in the areas mentioned above.

9.6 Tutor/Demonstrator/Instructor with MBBS or equivalent degree may be appointed as required in each of the basic science departments to assist faculty members in practical/demonstrations. However, they will not be counted as the faculty.

A unit of a clinical department shall be composed of the following:

Professor/Associate Professor – one

Assistant Professor/Lecturer – one

Senior Resident/Registrar/Teaching Assistant- one

Resident/House officer - one

Though the Senior Consultant/Consultant/Senior Registrar/Registrars are hospital positions for providing clinical services in the hospital, they are accepted for clinical teaching of undergraduate medical students.

Faculty appointments must be approved by the concerned university authorities before they are employed by the medical colleges.

9.7 **<u>Eligibility criteria for faculty</u>:**

9.7.1 All faculty appointments must be according to the rules of the University/ Institution/Academy. The following are general guidelines for faculty appointments.

9.7.2 All medical personnel must possess a basic university postgraduate degree or equivalent qualifications in the

relevant discipline in order to be eligible to become a faculty member. They should also have specialist registration with the Nepal Medical Council, where applicable.

9.7.3 In basic medical science subjects such as Human Anatomy, Physiology, Pharmacology, Biochemistry and Microbiology non-medical faculty (those faculty who do not have MBBS or equivalent qualification), with M.Sc. (Medical) degree may be appointed to the extent of 30% of the total number of the required faculty positions in a department.

9.7.4 In the case of Community Medicine/Community Health Sciences as there are many subjects included in teaching / learning activities, non-medical faculty can be included up to a maximum of 50%.

9.7.5 The qualification of Master of Science ; M.Sc. (Medical) in the concerned basic medical science subjects, shall be sufficient for initial faculty appointment.

NB: In order for the non-medical basic science faculty to become Associate Professor or Professor, it is mandatory to posses a PhD degree in the appropriate discipline.

9.8 **Designation of the faculty and their criteria:**

The nomenclatures of the designation for faculty positions are:

- Professor
- Associate Professor
- Assistant Professor
- Lecturer

The Nepal Medical Council strongly recommends that the designation/nomenclature of the faculties should preferably be uniform among all the Universities/Institutions throughout the country as early as possible.

All affiliated institutions must have the teaching faculty appointment approved by the parent University/Institutions/Academy.

9.9 **Minimum Faculty Requirements for 150 admissions annually :**

9.9.1 In the departments of Human Anatomy, Physiology, Biochemistry, Microbiology and Pharmacology, a maximum of 30% of faculty members may be appointed full time from non medical backgrounds (as per the breakdown in the tables).

9.9.2 If a medical basic science faculty is not available, one clinical science faculty with postgraduate MD/MS or equivalent qualification in a clinical discipline may be included as a resource faculty * member in that relevant basic medical sciences and community medicine/community health sciences department and shall be counted as a full time faculty member in that department only. Such a resource faculty member may be appointed by the institution in all basic science departments.

*provided medical basic science faculty is not available.

Table 1.

Showing the faculty requirements in basic medical sciences and community medicine/community health science an annual intake of 150 students.

Departments	**Prof.**	**Assoc. Prof./Reader**	**Asst. Prof./lecturer**	**Total**
Human Anatomy	1	2	5	8
Physiology	1	2	4	7
Biochemistry	1	2	3	6
Microbiology	1	2	3	6
Pathology	1	2	5	8
Pharmacology	1	1	3	5
Community Medicine/ Community Health Science	1	2	6	9
Total				**49**

Table 2.

Showing the faculty requirements in clinical sciences for an annual intake of 150 students admission annually.

Departments	**Prof**	**Assoc. Prof.**	**Asst. Prof./Lecturer**	**Total**
Internal Medicine	3	3	6	12
General Surgery	3	3	6	12
Obstetrics/Gynaecology	2	2	4	8
Pediatrics	2	2	4	8
Orthopedics	2	2	4	8
Emergency	2	2	4	8
Anesthesiology	1	2	5	8
Radiodiagnosis	1	1	4	6
Ophthalmology	1	1	2	4
Otorhinolaryngology	1	1	2	4
Dermatology	1	1	2	4
Psychiatry	1	1	2	4
Dental Surgery	1	1	2	4
Forensic Medicine	1	0	2	3
Primary Care*/General Practice				
Med. Education **				
Total				**93**

* indicate those departments in which the minimum number of faculty requirement must be defined and fulfilled within a period of five years from the time of commencement of the MBBS program in the respective medical colleges.

*In five years time from the implementation of this guideline each and every medical college should have independent departments of General Practice and Emergency Medicine.

**Medical Education Department should have one Professor or Associate professor or Principal of the College along with a minimum of 4 associate faculty members who may belong to other departments having exposure in medical education.

Student : Hospital Bed Ratio = 1:6

Bed Occupancy = 70%

OPD attendance of the patients:

Minimal number of daily OPD patients for 150 annual intake should be 900.

Super speciality services:

Super specialty services have to be provided by colleges after having brought out first batch of MBBS graduates

Table : 3

Showing the requirement of hospital beds and units in clinical departments for an annual intake of 150 students.

Departments	**Total No. of Beds = 900**	
	No of Beds	No of Units
Internal Medicine + CCU	180 + 10	6
General Surgery	180	6
Obstetrics & Gynaecology	120	4
Paediatrics	120	4
Orthopaedics	120	4
Ophthalmology	30	1
Otorhinolaryngology	30	1
Psychiatry	30	1
Dermatology	30	1
Dental Surgery	10	1
Emergency including Observation	30	1
Anaesthesiology / ICU	10	1

Table 4.

Requirement of super specialty services for 900 bedded hospital for an annual intake of 150 students.

Departments	Super speciality
Internal medicine	Coronary care Unit Gastrointestinal Endoscopy services Gastrointerology,hepatology, cardiology,nephrology, neurology, pulmonology
Surgery	Burn unit Urology service Laproscopic surgery Plastic, thoracic,and neurosurgery
Obstetrics and Gynaecology	Gynaecological oncology services Reproductive health services Infertility clinic
Paediatrics	Paediatric Intensive care Unit Immunization services Well baby clinic Neonatal Intensive Care Unit ARI clinic Gastrointerology, pulmonology
Anaesthesiology	Intensive care Unit Pain clinic Perioperative medicine
Orthopaedics	Trauma services Spinal injury Services Joint replacement services
Ophthalmology	Phaco service Glaucoma clinic Retinal clinic
Otorhinolaryngology	Audiometry Speech therapy tympanography
Psychiatrics	Drug abuse rehabilitation service Memory clinic
Radiology	Ultra sound CT Scan MRI
Emergency	Management of mass casualties
Dental	Three speciality service
Dermatology	Laprosy clinic HIV and STD clinic
Forensic Medicine	Autopsy /medico legal services
General practice	Comprehensive primary care

10. The Medical College

In addition to fulfilling the requirement for the NMC accreditation to run the MBBS program, the medical college must maintain a good environment for imparting quality medical education in Nepal.

The medical college must have the required number of departments, sections, together with an adequate number of faculty and staff, both administrative and technical.

The head of the college may be designated the Principal/Campus Chief/Dean, as per the nomenclature adopted by the respective universities to which the college/campus is affiliated to, and must meet the appointment criteria outlined by the affiliating University.

Ideally, all the activities related to the academic program should be located at the same site. However, for those colleges which have physical infrastructure at geographically separated locations, or have already made arrangement to send students to different hospitals or health institutions for acquiring clinical/ community experiences, care should be taken to ensure that the students are not physically exhausted by commuting. Appropriate accommodation must be arranged for students during teaching- learning activities.

Table 5.

For running the MBBS program the following departments are required:

1.	Human Anatomy
2.	Physiology
3.	Biochemistry
4.	Pathology
5.	Microbiology
6.	Pharmacololgy
7.	Community Medicine/Community Health Science
8.	Forensic Medicine
9.	Internal Medicine
10.	General Surgery
11.	Obstetrics and Gynaecology
12.	Paediatrics
13.	Orthopaedics
14.	Ophthalmology
15.	Otorhinolaryngology
16.	Psychiatry
17.	Dermatology
18.	Dental Surgery
19.	Radiology
20.	Anesthesiology
21.	Emergency and General Practice
22.	Medical Education

The administrative structure of the Medical College/Campus should comprise the following sections:

1. General and Personnel Administration
2. Fiscal and Internal Auditing
3. Planning and Evaluation
4. Academic and Examination
5. Procurement and Store
6. Learning Resources including Audio-visual and Medical Illustration
7. Students' Welfare including Hostel and Extra- curricular activities
8. Property, Security, Transport and Repair and Maintenance
9. Research and Publication

10.1. **General and Personnel Administration section:**

All matters related to general and personnel administration of the college/campus should be looked after by this section.

10.2. **Fiscal and Internal Audit Section:**

The fiscal section should be responsible for the financial planning and management of the medical college/campus. A strong financial commitment must be ensured for the sustainability of the institution. An internal audit section must check and report on the budget, procurement, and store inventory according to the financial rules and regulations pertaining to the colleges/campus.

10.3. **Planning and Evaluation Section:**

This section should conduct annual planning, budgeting and annual program evaluation.

10.4. **Academic/Examination Section:**

The academic and examination section should look after the academic programs and prepare the academic calendar. An annual/semester academic calendar of operation for all years / semesters must be prepared by the college/school/institute/campus specifying the details of teaching schedules of theory, practical/clinical teaching/learning activities.

This section should also ensure that the examinations are held effectively, efficiently and confidentially and the results of the examinations are published in a timely manner and feedback given to individual students.

10.5. **Procurement and Store Section:**

All matters related to the procurement and store is carried out by this section.

10.6. **Learning Resources Section:**

10.6.1 **Library :**

A Central library with good ventilation and lighting must provide sufficient space with comfortable sitting

arrangements for allowing double the number of annual admissions of students to sit and study at any given point in time.

For the core text books recommended by the curriculum there must be at least one book for every five students in the class. In addition, there must also be adequate numbers of reference books (1 book for every 20 students) which are to be placed in the reference section and/or departmental libraries.

In general a minimum of **6000** volumes of books should be made available for an annual intake of **150** students. The major bulk of the core text books kept in the library must be of latest editions.

A good number of national/international medical journals related to all subjects must be available.

Medical Colleges/Campuses must provide free e-library/e-learning and internet services to the faculty and students. The Central library should remain open preferably twenty- four hours a day, to provide the opportunity to learn during any hour of the day or night.

The Central Library must have an adequate number of personnel with relevant skills and expertise to provide library services are provided as mentioned above. The Library should be led and managed by a person with a minimum of Bachelor degree in library science and with adequate experience. It should also employ an I T specialist.

10.6.2 **Audio-visual and Medical Illustration Section:**

An Audio-visual and Medical Illustration Section must be established to provide sufficient numbers of overhead projectors, multimedia, laptop, television and artist facilities for helping teachers to teach effectively and students to learn better. The colleges/campuses are encouraged to continuously adapt to new and innovative technologies for fostering effective teaching /learning activities.

10.6.3 **Lecture Rooms:**

A minimum of four lecture halls with comfortable sitting arrangements together with good ventilation, lighting, acoustic system and audio-visual aids should be made available for carrying out teaching/learning activities effectively.

10.6.4 **Examinations Hall :**

The academic/examination section must ensure that all examinations are held properly by maintaining the examination norms of the respective University. Sitting arrangements may be made in a separate examination hall or in classrooms with adequate invigilation.

10.6.5 **Auditorium:**

Medical college/campus/school must have an auditorium of adequate capacity for holding scientific and other activities.

10.7. **Students' Welfare including Hostel and Extra-curricular section:**

The students' Welfare Section should look after the welfare of the students including providing hostels and extra curricular activities. Students' hostel for both female and male must provide adequate accommodation of adequate standard.

Hostels should be on the campus or in close vicinity for maximum use of library and participation in clinical learning activities, including off time hospital exposure for patient care and management.

10.8. **Property, Security and Transport & Repair and Maintenance Section :**

The safety of the college/campus physical property and students, faculty and staff must be ensured by the property section by providing adequate security. The transport of staff and students is to be organized through the transport section. All matters related to the repair and maintenance of all infrastructure,

electrical and sanitary and all others are looked after by the section.

10.9. **Research and Publication:**

A Medical College/Campus must establish a Research and Publication unit/ section/department and must show evidences of research and publication by faculty must be evident by the time the first batch of students pass out of the college/campus.

11. The Teaching Hospital:

11.1 The teaching hospital of a medical college/ campus/ school should run under a medical director who should preferably be from among the faculty of the medical college.

For an annual admission of **150** students, an additional **600** bedded (total **900** beds) teaching hospital with all clinical departments with specific number of units must be available for clinical postings and rotation of students which will start from third year onwards.

11.2 In order to widen the clinical and community field experiences, the medical colleges are encouraged to adequately expose their medical students to other hospitals and rural community settings in addition to clinical placements at the institutions' own teaching hospital. However, the beds of these hospitals and community centers will not be counted towards fulfillment of the NMC requirements.

In the case of those medical colleges/campus/schools/institutions/ either constituent or affiliated to a University, which have already been granted permission by Nepal Government to use government hospitals for running the MBBS program, a memorandum of understanding (MOU) must be signed between the Medical School/Institute/ College/Campus and the management of the concerned Government Hospital. Appropriate faculty positions for the Senior Consultants, Consultants and Registrars working in those hospitals should be awarded as per Nepal Medical Council faculty norms. The commitment of such faculty must be

obtained in writing for their involvement in and contribution to the teaching learning activities of the medical students throughout the MBBS program. The MOU and the undertaking signed by the individual faculty members must be produced before Nepal Medical Council to ensure the environment and spirit of collaboration and cooperation between the Medical School/Institute/College and the Government hospital for academic activities. The academic calendar and other related documentation should be in place.

11.3 For annual intake of **150** students a minimum of a **900** bed hospital with all clinical departments with the corresponding specific numbers of units must be functional for clinical postings and rotation of students.

11.4 In order to ensure adequate community and clinical exposure/ experience, the medical colleges should expose their medical students to other hospitals and rural community settings in addition to clinical placements at their own teaching hospitals. However, the beds of these hospitals and community centers will not be counted towards fulfillment of the NMC requirements.

11.5 70% occupancy of the hospital beds is required for the purpose of students clinical experiences.

11.6 The most important aspect of clinical teaching is to identify the learning objectives for different semesters/years by the concerned departments and their strict implementation of those objectives through fixed clinical placements schedules. In addition to acquiring basic insight into the disease manifestation and response to therapy, hands on skill development either on peers, mannequins or real patients under adequate supervision of the faculty/Senior Residents must be the core activity during the clinical rotations. It is also crucial to provide the students with timely feedback on their learning and performance. This will, among other things, provide the students an opportunity to realize their deficiencies and sharpen their clinical skills.

11.7 A fixed time table together with the clinical topics allocated for daily teaching either in wards or OPD must be clearly written in the attendance register of clinical teaching in every department.

11.8 Ambulatory teaching at OPD is to be favored as ample common clinical materials are available in the OPD. Hence a separate OPD teaching/demonstration room is desirable for all department of the teaching hospitals.

11.9 Medical College/Campus/Schools are permitted, if and when needed, to use other affiliate hospitals/health centers/community centers for carrying out teaching- learning activities of medical students. However, the beds of this hospital will not be counted towards fulfilling NMC requirements. A memorandum of understanding between the medical college and the affiliated hospitals/health centers/community centers must be signed and must be updated as long as they are being used for the teaching-learning activities. Participation of the medical doctors of such affiliated hospitals/health centers/community centers in teaching- learning activities of the medical students is encouraged to foster the relationship of collaboration and cooperation between the medical college and the affiliate hospitals/health centers/community centers for the cause of medical education in Nepal. Visiting faculty appointments may be given to medical doctors who qualify the faculty criteria, after getting approval of the respective university.

11.10 While posting medical students on clinical placements, a well planned rotation schedule together with learning objectives must be clearly specified for the students to follow and acquire. The attendance record of individual students and the names of the topics taught during such placement together with the names and signature records of the respective faculty members must be produced upon demand by the proper authorities.

12. Departmental Faculty and Non-faculty staff

12.1 BASIC MEDICAL SCIENCES

12.1.1 Department of Human Anatomy:

Table 6.

Showing the faculty requirement in the department of Human Anatomy for annual intake of 150 students

Category	Professor	Assoc. Professor	Asst. Professor/Lecturer	Prof./Assoc.Pro/ Asst. Prof./lecturer	Total
I Having MD/MS or equivalent postgraduate degree in Anatomy after doing MBBS/BDS or equivalent degree	**1**	**1**	**2**		**4**
II Having MD/MS or equivalent degree in clinical subject but working full time in Human Anatomy Departments only				**1**	**1**
III Having MSc. (Medical) ; PhD or equivalent degree in Human Anatomy/Anatomy after BSc. Degree		**1**	**2**		**3**
Total number of faculties					**8**

NB :

1. Clinician with MD/MS/Ph.D or equivalent degree in clinical disciplines who desires to remain full time in the department of Human Anatomy only and be involved exclusively in vertical integration of early exposure of students in clinical settings of teaching hospital by correlating clinical problems with Human Anatomy, and teaching history taking skills to sensitive students to early clinical experience during the time of learning basic sciences by students, making them learn to acquire communication skill, demonstrating signs and symptoms related to specific organ system, and enabling students to realize the importance of Human Anatomy for understanding of clinical problems, is to be considered as a Resource faculty member in Human Anatomy and can be counted in faculty number of Human Anatomy Department. However, counting the same person as faculty in Surgery or Orthopedics or other clinical department shall not be permitted. Only one such resource person may be appointed as resource faculty member in human anatomy department.

2. Until a time when adequate numbers of junior faculty members (Asst. Prof./Lecturer) are available, their posts can be fulfilled by Senior faculty members (Professor/Associate Professor).

3. If faculty from category II is not available, it can be replaced by either Category I or category III.

4. If faculty from category III is not available, it can be replaced by either category I or Category II

   Non faculty Staff:

   (i) Tutor/Demonstrator/Instructor with minimum MBBS or equivalent qualification -2

   (ii) Technical staff to prepare Wet Specimens/ Models of anatomical parts/ Section and Histology slides in Anatomy Museum - 2

   (iii) Departmental Secretary -1

   (iv) Dissection Hall/Museum Hall/Histology/Osteology Sections attendant including Departmental attendants – 4

12.1.2 Department of Physiology :

Table 7.

Showing the faculty requirement in the department of Physiology for annual intake of 150 students

Category	Professor	Assoc. Professor	Asst. Professor/ Lecturer	Prof./Assoc.Prof./Asst.Prof./ lecturer	Total
I Having MD or equivalent postgraduate degree in Physiology after doing MBBS/BDS or equivalent degree	**1**	**1**	**2**		**4**
II Having MD or equivalent degree in clinical related subject but working full time in Physiology Department only				**1**	**1**
III Having MSc. (Medical) ; PhD or equivalent degree in Physiology by those after B.Sc. degree.				**2**	**2**
Total number of faculties					**7**

NB.:

1. Clinician with MD/MS/Ph.D or equivalent degree in a clinical discipline who wants to remain full time in Physiology Department only and be involved exclusively in early clinical exposure of students in clinical settings of the teaching hospital for correlating clinical problems with Physiology; teach history taking skills to sensitize students to early clinical

experience during the time of learning basic sciences by students make them learn to acquire communication skill demonstrate signs and symptoms related to specific organ-systems; and enable students to realize the importance of learning physiology for understanding and solving clinical problems may be appointed as Resource faculty member and shall be counted in faculty number. Not more than one person can be appointed as resource person at a time.

2. Until a time when adequate numbers of junior faculty members (Assistant Professor/Lecturer) are available, their posts can be fulfilled by Senior faculty members (Professor/Associate Professor).
3. If faculty from category II are not available, they can be replaced by either Category I or category III.
4. If faculty from Category III are not available, they can be replaced by either category I or category II.

Non –faculty Staff

(i) Tutor/Demonstrator/Instructor - 2
(with MBBS or equivalent qualification)

(ii) Technical Staff (for Hematology practical
and clinical practical demonstrations) – 2

(iii) Laboratory Attendant (for helping to conduct Students practicals) including Departmental Attendant -2

(iv) Departmental Secretary -1

12.1.3 Department of Biochemistry :

Table 8.

Showing the faculty requirement in the department of Biochemistry for annual intake of 150 students

Category	Professor	Assoc. Professor	Asst. Professor/ Lecturer	Prof./Assoc.Pro/Asst.Prof./ lecturer	Total
I Having MD or equivalent postgraduate degree in Biochemistry after doing MBBS/BDS or equivalent degree	**1**	**1**	**1**		**3**
II Having MD or equivalent degree in clinical subject but working full time in Biochemistry Department only.				**1**	**1**
III Having M Sc. (Medical); PhD or equivalent degree in Biochemistry by those after B.Sc. Degree.				**2**	**2**
Total number of faculties					**6**

NB :

1) Clinician with MD/MS/Ph.D or equivalent degree in clinical discipline who wants to remain full time in Biochemistry Department and be involved exclusively in early clinical exposure of students in clinical settings of teaching hospital for correlating clinical problems with Biochemistry and teach history taking skills to sensitize students to early clinical experience during the time of learning basic sciences, make them acquire

communication skills, demonstrate signs and symptoms together with biochemical interpretation of data related to specific organ-system and enable students to realize the importance of learning biochemistry for understanding and solving clinical problems may be appointed a Resource faculty member in the Biochemistry Department and be counted in faculty number in the department. Only one person can be appointed as a Resource faculty member at a time.

2) Until a time when adequate numbers of junior faculty members (Asst. Prof./Lecturer) are not available, their posts can be fulfilled by Senior faculty members (Professor/Associate Professor).
3) If faculty from category II is not available, it can be replaced by either Category I or category III.
4) If faculty from category III is not available, it can be replaced by either category I or Category II.

Non –faculty Staff:

(i) Tutor/Demonstrator/Instructor with minimum MBBS or equivalent qualification -2
(ii) Technical Staff (to provide Hospital Services in Biochemistry) -4
(iii) Departmental Secretary -1
(iv) Laboratory Assistant (to organize, prepare for Laboratory practical for students) including Departmental Attendants – 2

12.1.4 Department of Pathology:

Table 9.

Showing the faculty requirement in the department of Pathology for annual intake of 150 students

Category	Professor	Assoc. Professor	Asst. Professor/Lecturer	Prof./Assoc.Prof. /Asst.Prof./ lecturer	Total
I Having MD or equivalent postgraduate degree in Pathology after doing MBBS or equivalent degree	**1**	**1**	**5**		**7**
II Having MD/MS or equivalent degree in clinical subject but working full time in Pathology Department only				**1**	**1**
Total number of faculties					**8**

NB :

1. Clinician with MD/MS/PHD or equivalent degree in clinical discipline who wants to remain fulltime in Pathology department and be involved exclusively in early clinical exposure of students in clinical settings of teaching hospital for correlations clinical problems with Pathology and teach history taking skills to sensitize students to early clinical experience during the time of learning basic sciences, make them acquire communication skills demonstrate signs and symptoms related to specific organ-system and enable students to realize the importance of learning pathology for understanding and solving clinical problems shall be appointed as Resource faculty member and may be counted in faculty number. Not more than one person can be appointed as resource faculty member at a time.
2. Until a time when adequate numbers of junior faculty members (Asst. Prof./Lecturer) are available, their posts can be fulfilled by Senior faculty members (Professor/ Associate Professor).

Non-faculty staff:

1. Tutor/ Demonstrator/ Instructor - 2
   (with minimum MBBS or equivalent degree)
2. Technical Assistants/ Technicians for Haematology, Cytology/ Histopathology sections for hospital services - 4
3. Laboratory Assistants (for Histopathology/Haematology for students) including Departmental attendant - 2
4. Departmental Secretary -1
5. Museum technician (to prepare and mount Wet specimens in Pathology Museum) – 2

12.1.5 Department of Microbiology:

Table 10.

Showing the faculty requirement in the department of Microbiology for annual intake of 150 students

Category	Professor	Assoc. Professor	Asst. Professor/ Lecturer	Prof./Assoc. Prof./ Asst.Prof./lecturer	Total
I Having MD/MS or equivalent postgraduate degree in related subject after doing MBBS/BDS or equivalent degree	1	1	1		3
II Having MD/MS or equivalent degree in clinical related subject but working full time in Microbiology Department only				1	1
III Having MSc. (Medical) ; Ph.D or equivalent degree in Microbiology by those after BSc. Degree				2	2
Total number of faculties					6

NB.:

1) Clinician with MD/MS/Ph.D or equivalent degree in clinical discipline who wants to remain full time in Microbiology Department and be involved exclusively in early clinical exposure of students in clinical settings of teaching hospital and correlate clinical problems with Microbiology and teach history taking skills to sensitize students to early clinical experience during the time of learning basic sciences, make them acquire communication skills, demonstrate signs and symptoms related to specific organ-system and enable students to interpreting microbiological datas and realize the importance of learning microbiology for understanding and solving clinical problems may be appointed Resource faculty member and be counted in faculty number in the department. Only one person can be appointed as a Resource faculty member at a time.
2) Until a time when adequate numbers of junior faculty members (Asst. Prof./Lecturer) are not available, their posts can be fulfilled by Senior faculty members (Professor/Associate Professor).
3) If faculty from category II is not available, it can be replaced by either Category I or category III.
4) If faculty from category III is not available, it can be replaced by either category I or Category II

Non faculty staff:

(i) Tutor/ Demonstrator/ Instructor - 2
(with minimum MBBS or equivalent degree)

(ii) Technical staff/ Technicians
(for Bacteriology,Virology, Mycology and
Parasitology (one each) for hospital services - 4

(iii) Laboratory Attendants
(for practicals for students) including
departmental attendants - 2

(iv) Departmental Secretary - 1

12.1.6 Department of Pharmacology :

Table 11.

Showing the faculty requirement in the department of Pharmacology for annual intake of 150 students

Category	Professor	Assoc. Professor	Asst. Professor/ Lecturer	Prof./Assoc.Prof./ Asst.Prof./ lecturer	Total
I Having MD or equivalent postgraduate degree in Pharmacology after doing MBBS/BDS or equivalent degree	**1**	**1**	**1**		**3**
II Having MD/MS or equivalent degree in clinical related subject but working full time in Pharmacology Departments only				**1**	**1**
III Having MSc. (Medical) ; Ph.D or equivalent degree in Pharmacology/M. Pharm by those after B.Sc./B. Pharma degree.				**1**	**1**
Total number of faculties					**5**

NB.:

1) Clinician with MD/MS/Ph.D or equivalent degree in clinical discipline who wants to remain full time in Pharmacology department and be involved exclusively in early clinical exposure of students in clinical settings of teaching hospital and correlate clinical problems with Pharmacology and teach history taking to sensitize students to early clinical experience during the time of learning basic medical sciences, make them learn to acquire communication skills, demonstrate signs and symptoms related to specific organ-system and enable students to realize the importance of learning Pharmacology for understanding the treatment for solving clinical problems may be appointed as Resource faculty member and shall be counted in faculty number. Not more than one person can be appointed as resource person at a time.

2) Until a time when adequate numbers of junior faculty members (Asst. Prof./Lecturer) are available, their posts can be fulfilled by Senior faculty members (Professor/Associate Professor).
3) If faculty from category II is not available, it can be replaced by either Category I or category III.
4) If faculty from Category III is not available, it can be replaced by either category I or category II.

Non faculty staff:

(i) Tutor/Teaching Assistant/Demonstrator/Instructor -2
(with minimum MBBS or equivalent qualification)

(ii) Technical Assistant/ Technician -1

(iii) Departmental Secretary -1

(iv) Laboratory Assistant (for students Prescription writing and other nature of practical) including Departmental attendant -2

12.1.7 Community Medicine/Community Health Science :

Table 12.

Showing the faculty requirement in the Department of Community Medicine/Community Health Science for annual intake of 150 students

Category	Professor	Assoc. Professor	Asst. Prof./ Lecturer	Prof./Assoc.Prof./ Asst.Prof./ Lecturer	Total
I. Having MD or equivalent postgraduate degree in Community Medicine after doing MBBS or equivalent degree	**1**	**1**	**2**		**4**
II. Having MD/MS or equivalent degree in clinical subject but working full time in Community Medicine Department only				**3**	**3**
III. Having MSc.; PhD or equivalent degree in subjects related with Community Medicine.		**1**	**1**		**2**
Total number of faculties					**9**

NB.

In Community Medicine/Community Health Science, in addition to two faculty members with MD in Community Medicine, other faculty members in Biostatistics, Demography, Sociology, Epidemiology, Public Health, Nutrition, General Practice, Reproductive Health, Hospital Management, Health Economics and other relevant areas constitute the total faculty number. The other faculty members may be appointed full time or as visiting faculty as per the need of the department.

Extra faculty members are to be appointed in specific areas of need when medical institutions/ campus/ college is involved in out reached community clinics, community centres or community hospitals.

Non- faculty staff:

(i) Tutors/Demonstrators/Instructor (with minimum MBBS or equivalent degree) - 2

(ii) Technical Staff/Technician for Public Health Laboratory for testing specimens of drinking water and other specimens - 2

(iii) Departmental Secretary -1

(iv) Museum Attendant -1

(v) Laboratory and Departmental Attendant -1

12.1.8 Department of Forensic Medicine:

Table 13.

Showing the faculty requirement in forensic medicine for annual intake of 150 students

Faculty position	Number
Professor/Associate Prof.	1
Asst. Prof/lecturer	2
Total number of faculties	**3**

NB.

Under the existing law in Nepal, Post mortems/autopsies are carried out only in Government medical institutions/ hospitals where full time faculty must be present. However, in medical colleges where post mortems auto pies are not permissible to be performed under the existing law in Nepal, Visiting faculty may also be acceptable.

Non-faculty Staff:

1. Tutor/ Demonstrator/ Instructor (with minimum MBBS or equivalent degree) -1
2. Technician & Technical Staff for Museum wet specimen preparation -1
3. Laboratory Attendant for helping students' practical -1
4. Museum Attendant including departmental attendant -1
5. Departmental Secretary-1

For postmortem work and other medico-legal work extra staff must be provided.

12.2 CLINICAL DEPARTMENTS

- The staffing pattern of departments shall be on the basis of the units under respective departments which shall be headed by a Professor or Associate Professor
- A unit shall have not more than 30 beds. However, in the departments of Ophthalmology, Otorhinolaryngology, Dermatology, Psychiatry and Dental Surgery, one unit shall have less than 30 beds.

The faculty and non- faculty staff of Each unit shall be as follow :

The Faculty:

a) Professor / Associate Professor -1
b) Assistant Professor/ Lecturer -1

Non-faculty clinical staff:

(i) Senior Resident/ Registrar/Teaching Assistant -1
(ii) Resident/House Officer – 1

NB:

Senior Resident/Registrar/Teaching Assistant must have recognized postgraduate degree qualifications.

In addition to the above faculty members and non-faculty clinical staff members, there should be provision for additional medical personnel Consultants, Sr. Registrars, Sr. Residents and Junior Residents (House Officers) in different clinical departments to cover ICU, CCU, Emergency, Burn Ward, NICU and other Wards for providing quality patient care services round the clock as per the need of the respective teaching hospitals. Each departments is required to have other supportive staff as per the norms of teaching hospital.

12.2.1 Department of Internal Medicine:

Table 14.

Showing the faculty requirement in the department of Internal Medicine for annual intake of 150 students

Faculty position	Number
Professor	3
Associate Prof.	3
Asst. Prof/lecturer	6
Total number of faculties	**12**

12.2.2 Department of General Surgery:

Table 15.

Showing the faculty requirement in the department of General Surgery for annual intake of 150 students

Faculty position	Number
Professor	3
Associate Prof.	3
Asst. Prof/lecturer	6
Total number of faculties	**12**

12.2.3 Department of Obstetrics and Gynaecology:

Table 16.

Showing the faculty requirement in the department of Obstetrics and Gynecology for annual intake of 150 students

Faculty position	Number
Professor	2
Associate Prof.	2
Asst. Prof/lecturer	4
Total number of faculties	**8**

12.2.4 Department of Paediatrics:

Table 17.

Showing the faculty requirement in the department of Pediatrics for annual intake of 150 students

Faculty position	Number
Professor	2
Associate Prof.	2
Asst. Prof/lecturer	4
Total number of faculties	**8**

12.2.5 Department of Orthopaedics:

Table 18.

Showing the faculty requirement in the department of Orthopaedics for annual intake of 150 students

Faculty position	Number
Professor	2
Associate Prof.	2
Asst. Prof/lecturer	4
Total number of faculties	**8**

12.2.6 Department of Ophthalmology:

Table 19.

Showing the faculty requirement in the department of Ophthalmology for annual intake of 150 students

Faculty position	Number
Professor	1
Associate Prof.	1
Asst. Prof/lecturer	2
Total number of faculties	**4**

12.2.7 Department of Otorhinolaryngology:

Table 20.

Showing the faculty requirement in the department of Otorhinolaryngology for annual intake of 150 students

Faculty position	Number
Professor	1
Associate Prof.	1
Asst. Prof/lecturer	3
Total number of faculties	**5**

12.2.8 Department of Psychiatry:

Table 21.

Showing the faculty requirement in the department of Psychiatry for annual intake of 150 students

Faculty position	Number
Professor	1
Associate Prof.	1
Asst. Prof/lecturer	2
Total number of faculties	**4**

12.2.9 Department of Dermatology:

Table 22

Showing the faculty requirement in the department of Dermatology t for annual intake of 150 students

Faculty position	Number
Professor	1
Associate Prof.	1
Asst. Prof/lecturer	2
Total number of faculties	**4**

12.2.10 Department of Dental Surgery:

Table 23.

Showing the faculty requirement in the department of Dental Surgery for annual intake of 150 students

Faculty position	Number
Professor	1
Associate Prof.	1
Asst. Prof/lecturer	2
Total number of faculties	**4**

12.2.11 Department of Radiodiagnosis:

Table 24.

Showing the faculty requirement in the department of Radiodiagnosis for annual intake of 150 students

Faculty position	Number
Professor	1
Associate Prof.	1
Asst. Prof/lecturer	3
Total number of faculties	**5**

12.2.12 Department of Anesthesiology:

Table 25.

Showing the faculty requirement in the department of Anesthesiology for annual intake of 150 students

Faculty position	Number
Professor	2
Associate Prof.	2
Asst. Prof/lecturer	4
Total number of faculties	**8**

12.2.13 Department of Emergency and General Practice:

Table 26.

Showing the faculty required in the department of Emergency and General Practice Department for an annual intake of 150 students.

Faculty position	Number
Professor	1
Associate Prof.	2
Asst. Prof/lecturer	5
Total number of faculties	**8**

- The Faculty may possess PG degree in Emergency medicine/General Practice/Internal Medicine/ General Surgery/ Orthopaedics.
- In order to provide efficient patient care and structured teaching learning it is desirable that there should be separate medical and surgical emergency sections for patients attending the Emergency Department and a separate teaching-learning room for students in the department of emergency.
- Other human resources for health should be recruited as per the need for providing emergency and casually service.

12.3 MEDICAL EDUCATION DEPARTMENT:

The Medical Education Department should, as a minimum, consist of :

1. Principal/ Vice-Principal/ Professor or
   Associate Prof. in Medical Education -1
2. Adjuct/ Associate faculty staff who may belong to other departments having interest and adequate exposure in medical education -4
3. Support Staff:
   Office Secretary – 1
   I T expert – 1
   Audio visual technician – 1
   Photography technician – 1

12.4 CENTRAL LIBRARY :

The Central Library should, as a minimum, consist of :

Librarian with Bachelor degree in Library Science with experience – 1
Assistant Librarian with Bachelor degree in library science – 1
Documentalist -1
Cataloguer – 1
Library Assistants – 4

12.5 CENTRAL AUDIO – VISUAL SECTION :

This Section should, as a minimum, consist of :

Audio-visual Technician-1
Medical Illustrator - 1
Audio-visual Assistant including attendants -2

The medical education department should strive towards establishing sub-units like a Curriculum unit, Skill Laboratory unit, Communication Skills unit, Teacher'e Training unit, Audio-visual unit etc. for effective teaching learning and conducting workshops/seminars related to medical education.