

## Preface

Medical science is constantly advancing with the advancement of science and technology. Global changes are happening in medical education in accordance and conformity of these advancements and changes. With the application of these knowledge and skills of medical science, future doctors should satisfy their patients with the changing needs of the community. Much changes are happening in teaching methods and teaching sites or learning environment. It is now an established fact that best learning is achieved through utilizing the learning environment in factual situation. A doctor can better learn by dealing with patients. Slogan of today is the unity of education and practice. The undergraduate curriculum for future doctor is expected to be so designed that it should focus more on real life situation and of learning i.e. more community oriented, community based as well as competency based. To achieve the competency to serve the people community campus partnership is very much appropriate and essential.

The undergraduate medical curriculum followed in the medical colleges was developed in 1988 through UNDP and WHO support by the Centre for Medical Education with an aim to produce community oriented doctors who will be able to provide essential primary health care to the community. That was the first documented curriculum ever developed in the country. But evaluation by UNDP (1990) and Godfrey et al (1996) revealed that it is neither community oriented nor competency based and there is room for much improvement. The need to develop a community- oriented and competency-based curriculum was felt by all concerned. For that series of workshops with specialists and experts from every discipline took place to develop a curriculum, which would reflect institutional, departmental objectives as well as subject wise learning objectives. As a whole the components of the curriculum such as, course contents, teaching method, strategy for teaching, materials or media used and the assessment system within the available timeframe were to be identified scientifically to provide the medical graduates with proper knowledge, skills and attitude. Thus the Undergraduate Medical Curriculum 2002 was developed and implemented. After a decade, with a view to the include the national goal, objectives, learning outcomes, competencies curriculum was updated as MBBS Curriculum 2012 which was implemented from session 2012-2013. After passing out of first batch of MBBS Curriculum 2012 in 2019 initiatives was taken to review and update the curriculum by the combined efforts of the Centre for Medical Education (CME), Directorate General of Health Services (DGHS) and Bangladesh Medical & Dental Council (BM&DC), MOH&FW and different Dean offices with the support from WHO Bangladesh. This enormous task has been efficiently completed with the most sincere and heartiest effort of the teachers of both public and private medical colleges and also delegates of concerned authorities and faculty members of CME. The activities in regards to technical support, compilation and editing were done by Centre for Medical Education (CME) as per its terms of reference.

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## **Preamble**

The quality of health care is under scrutiny all over the world because of increasing public expectation of their health care services. Therefore a positive change is always expected in the role of doctors. The role of teachers and students in teaching learning can bring positive changes in medical education, its strategy and process also needs to be reviewed and developed.

This reviewed MBBS curriculum 2020 has been developed and scientifically designed, which is responsive to the needs of the learners and of the community. The present curriculum, its assessment method is expected to effectively judge competencies acquired that are required to meet the health need of our people. It is gratifying to note that all concerned in the promotion of medical education in the country have involved themselves in the planning and formulation of this need-based and competency based curriculum which has been initiated under the auspices of the Centre for Medical Education (CME).

Though curriculum is not the sole determinant of the outcome, yet, it is very important as it guides the faculty in preparing their instruction and tells the students what knowledge, skills and attitude they have to achieve through the teaching learning process. The ultimate indicators of assessing curriculum in medical education is the quality of health services provided by its graduates with required competencies.

In conclusion, I would like to mention that the curriculum planning process is continuous, dynamic and never-ending. If it is to serve best, the needs of the individual students, educational institutions and the community to whom we are ultimately accountable, must be assessed.

I congratulate all who were involved in reviewing, redesigning, updating and developing the MBBS curriculum, particularly the Centre for Medical Education. They contributed to complete this activity a commendable job and deserve special appreciation.

**Professor Dr A.H. M. Enayet Hussain**

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## **Background and Rationale**

Curriculum planning, scheming and updating is not a stationary process, rather a nonstop course of action done on a regular basis through a scheme. It has been long since the Centre for Medical Education (CME) updated the “Curriculum for Under-graduate Medical Education in Bangladesh 2012”.

Now this MBBS curriculum 2012 is being reviewed and updated for coping with the changing needs of the society to achieve UHC & SDGs. Centre for Medical Education (CME) in association with BM&DC, Deans Offices, DGHS, MOH&FW under took the whole process. Need assessment for updating the 2012 MBBS curriculum in Bangladesh was conducted by CME after passing out of first batch in 2019. Findings of need assessment were disseminated among the principals, Deans, policy peoples from BM&DC, MOH&FW, DGHS and subject experts by CME with the support from WHO Bangladesh on 24<sup>th</sup> October 2019. Latter on the decisions were also shared and validated on 8<sup>th</sup> August 2020 with the concerned persons through Zoom meeting & through a stakeholders meeting on 26<sup>th</sup> August 2020. Several workshops were held through active participation of different subject experts professional groups, faculty members. Accordingly, first, second, third and fourth phase group meetings were held in September, October & November 2020 with support from WHO. Later on, in order to give a final shape of the recommendations a central core committee and technical working group meeting was held in November 2020 to sent the curriculum to BM&DC for further action. A taskforce group examined the revised undergraduate medical curriculum.

The revised undergraduate medical curriculum is expected to be implemented with the newly admitted students of 2021-2022 session. Performance of these; students as graduates will articulate about the achievement of this “Curriculum for Under-graduate Medical Education in Bangladesh–Updated 2020” with the reflection of integrated, need-based, core & optional, problem based, community oriented, community based & competency based though the curriculum is mainly discipline based.

I hope this curriculum will continue to serve as guiding principle for the students and faculty members. It is readily understood that in order to further improve, update this Curriculum for Under-graduate Medical Education in Bangladesh–Updated 2020 needs constant review, revision and updating to achieve UHC & SDGs.

Last but not least, I would like to extend my deep gratefulness to all faculty members of Centre For Medical Education and others who shared their expertise and insights and worked hard to generate this precious document.

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## Acknowledgement

Factors contributing to an effective medical education system are quality of students, quality of teaching staff, and their effective delivery of need based scientific curriculum. Although the best students are admitted in the medical colleges every year yet the medical graduates are not always of the desired quality for providing health services to the community. The answer then should be sought in other factors of which the most important is the curriculum. A curriculum is generally regarded as a programme of instruction for an educational institution and its plan takes the form of a descriptive outline of courses, their arrangement and sequence, the time assigned to them, the contents to be covered in them, the instructional methods to be employed and finally evaluation.

The enormous task of reviewing and updating of the MBBS curriculum 2012 was assigned to Centre for Medical Education (CME) as per it's TOR. The curriculum was reviewed and updated with a scientific approach of Delphi Technique in national workshops. The participants of these meetings/workshops were the Professors of the concerned departments/subjects, principals of the medical colleges, medical educationists, faculty members of CME and a good number of resource persons including the President & members of the Bangladesh Medical & Dental Council (BM&DC) and Deans of the Faculty of Medicine of Dhaka/Chattogram/Rajshahi/Sylhet Medical Universities, Shah Jalal University and concerned persons from DGME, DGHS and MOH&FW. The other supplementary approach was to make it evidence based through need assessments where 102 academic councils out of 112 different medical colleges submitted their views, teachers and intern doctors participated in focus group discussions. The overwhelming response of all categories of teachers for reviewing & updating of this curriculum is indeed praiseworthy. They have worked hard to identify and discard the superfluous elements from the course contents and added new elements to make teaching-learning process more relevant, meaningful and up-to date. Congratulations to them, they have done a commendable job. Efforts given by the principals, members of academic councils, teachers, students and intern doctor providing their valuable opinions during the need assessment in 2019 at the beginning of reviewing and updating of this MBBS curriculum are duly acknowledged. As director, CME I express my gratitude to all the members of National Core Committee (NCC) for their all cordial co-operation, guidance all the ways since beginning up to the completion of reviewing and updating of MBBS curriculum. I would like to acknowledge Professor Dr. Md. Humayun Kabir Talukder, Professor (Curriculum Development & Evaluation), CME for his efforts in co-coordinating this activity without which it would be difficult to complete this work. I acknowledge the technical and financial support from WHO Bangladesh.

The composition of the planners of this curriculum is unique. The authorities responsible for approving, implementing and functioning of this curriculum have worked together and involved themselves in its reviewing & updating. It is only natural that they left no stone unturned to get a need based updated curriculum.

I am grateful to all, who actively participated in this great job, specially the faculty members and staffs of Centre for Medical Education who worked very hard and efficiently to develop this MBBS Curriculum 2020 which is mainly discipline based with the reflection of integrated, core & optional, problem based, community oriented, community based in nature.

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## **Vision, Mission, Goal and Objectives of MBBS Course, Learning Outcomes/Competences of Fresh Graduates**

### **Vision:**

Ensuring a learning environment in undergraduate medical programme that encourages and promotes development of clinically, socially and culturally competent professionals motivated to serve the community with compassion and dedication

### **Mission:**

- To provide quality education with basic principles, methods and knowledge adequate to practice preventive, curative and promotive healthcare in the community
- To prepare professionals competent to deal with ethical and professional issues, having communication and decision making skills and attitudes, and capable of providing leadership and conducting research for future progression as a change agent.

### **Goal:**

To produce competent, compassionate, reflective and dedicated health care professionals who:

- consider the care and safety of their patients their first concern
- establish and maintain good relationship with patients, their attendants and colleagues
- are honest, trustworthy and act with integrity
- are capable of dealing with common diseases and health problems of the country and are willing to serve the community particularly the rural community;
- but at the same time acquire firm basis for future training, service and research at both national and international level.
- are committed to keep their knowledge and skill up-to-date through ‘Continuous Professional Development’ all through their professional life.

### **Objectives of MBBS Course:**

At the end of the MBBS Course students shall:

1. Acquire knowledge and understanding of
  - a) the sciences upon which Medicine depends and the scientific and experimental methods;
  - b) the structure, function and normal growth and development of the human body and the workings of the mind and their interaction, the factors which may disturb these, and the disorders of structure and function which may result;
  - c) the etiology, natural history and prognosis of the common mental and physical ailments. Students must have experience of emergencies and a good knowledge of the common diseases of the community and of ageing processes;
  - d) normal pregnancy and childbirth, the common obstetric emergencies, the principles of ante-natal and post natal care, and medical aspects of family planning and psycho-sexual counseling;

- e) the principles of prevention and of therapy, including health education, the amelioration of suffering and disability, rehabilitation, the maintenance of health in old age, and the care of the dying;
- f) human relationships, both personal and social and the interaction between man and his physical, biological and social environment;
- g) the organization and provision of health care in the community and in hospital, the identification of the need for it, and the economic, ethical and practical constraints within which it operates; and
- h) the ethical standards and legal responsibilities of the medical profession.

**2. Develop the professional skills necessary to**

- a) elicit, record and interpret the relevant medical history, symptoms and physical signs, and to identify the problems and how these may be managed;
- b) carry out simple practical clinical procedures;
- c) deal with common medical emergencies;
- d) communicate effectively and sensitively with patients and their relatives;
- e) communicate clinical information accurately and concisely, both by word of mouth and in writing, to medical colleagues and to other professionals involved in the care of the patient; and
- f) use laboratory and other diagnostic and therapeutic services effectively and economically, and in the best interests of his patients.

**3. Develop appropriate attitudes to the practice of medicine, which include**

- a) recognition that a blend of scientific and humanitarian approaches is needed in medicine;
- b) a capacity for self education, so that he may continue to develop and extend his knowledge and skills throughout his professional life, and recognize his obligation to contribute if he can to the progress of medicine and to new knowledge;
- c) the ability to assess the reliability of evidence and the relevance of scientific knowledge, to reach conclusions by logical deduction or by experiment, and to evaluate critically methods and standards of medical practice;
- d) a continuing concern for the interests and dignity of his patients;
- e) an ability to appreciate the limitations of his own knowledge, combined with a willingness, when necessary, to seek further help; and
- f) the achievement of good working relationships with members of the other health care professions.

## **Learning Outcomes of MBBS course:**

To achieve the National goal and course objectives, a set of “Essential learning outcomes / competences” which students of the medical colleges/institutes on completion of MBBS course and at the point of graduation must be able to demonstrate has been defined.

These “essential learning outcomes / competences” are grouped under three board headings:

- I The graduate with knowledge of scientific basis of Medical Practice
- II The graduate as a practitioner
- III The graduate as a professional

### **I. The graduate with knowledge of scientific basis of Medical Practice:**

The graduate will understand and be able to apply basic bio-medical (anatomy, cell biology, genetics, physiology, biochemistry, nutrition, pathology, molecular biology, immunology, microbiology, pharmacology and community medicine) principles, methods and knowledge to

- 1.1 understand the normal processes governing homeostasis, and the mechanisms underlying the common diseases and health problems of the country.
- 1.2 understand the psychological and sociological concepts of health, illness and disease and explain psychological and sociological factors that contribute to illness, course of disease and success of treatment.
- 1.3 select appropriate investigations necessary for diagnosis of common clinical cases and explain the fundamental principles underlying such investigative procedures.
- 1.4 select appropriate treatment (including rational prescribing of drugs), management and referral (if in the patient's best interest) plan for common clinical cases, acute medical emergencies and minor surgical procedures.
- 1.5 understand biochemical, pharmacological, surgical, psychological, social and other interventions in acute and chronic illness, in rehabilitation, and end-of-life care.
- 1.6 understand disease surveillance and prevention, health promotion including wider determinants of health, health inequalities, health risks.
- 1.7 understand communicable disease control in health care facility and community settings.
- 1.8 understand international health status, including global trends in morbidity and mortality of chronic diseases of social significance, the impact of trade and migration on health and the role of international health organizations.
- 1.9 undertake critical appraisal of diagnostic, therapeutic and prognostic trials and other quantitative and qualitative studies as reported in medical and scientific literature.
- 1.10 understand simple research questions in biomedical and population science and the design of relevant studies.

### **II. The Doctor as a practitioner**

#### **2.1. The graduate will have the ability to carry out a consultation with a patient (Appendix-III):**

- 2.1.1. Obtain and record an accurate medical history, including such related issues as age, gender, and socioeconomic status.
- 2.1.2. Perform a both comprehensive and organ system specific examinations, including a mental status examination.
- 2.1.3. Elicit patients' questions, understanding of their condition and treatment options, and their views, values and preferences.
- 2.1.4. Provide explanation, advice, reassurance and support.

**2.2. The graduate will have the ability to diagnose and manage clinical cases or will refer when necessary. (*Appendix I & II*):**

- 2.2.1. Interpret findings from the history, physical examination and mental-state examination and make an initial assessment of a patient's problems and a differential diagnosis appreciating the processes by which such diagnosis is tested scientifically.
- 2.2.2. Construct a plan of investigation in partnership with the patient, obtaining informed consent as an essential part of this process appreciating patient's right to refuse or limit the investigation.
- 2.2.3. Interpret the results of investigations, including growth charts, x-rays and the results of diagnostic procedures in *Appendix III*.
- 2.2.4. Synthesize a full assessment of the patient's problems and define the likely diagnosis or diagnoses.
- 2.2.5. Formulate a plan for management and discharge including referrals to the right professional, according to the established principles and best evidence, in partnership with the patient, their careers and other health professional as appropriate.
- 2.2.6. Respond to patients' concerns and preferences, obtain informed consent, recognize and respect patients' right to reach decisions about their treatment and care and to refuse or limit treatment.

**2.3. The graduate will have the ability to provide immediate care in medical emergencies in *Appendix IV*:**

- 2.3.1. Assess and recognize the severity of a clinical presentation and need for immediate emergency care.
- 2.3.2. Provide basic first-aid and immediate life support.
- 2.3.3. Provide cardio-pulmonary resuscitation or direct other team members to carry out resuscitation.

**2.4. The graduate will have the ability to prescribe drugs safely, effectively and economically. *Appendix III*:**

- 2.4.1. Obtain an accurate drug history, covering both prescription and non-prescription OTC drugs including complementary and alternative medications and demonstrate awareness of the existence and range of these therapies and how this might affect other types of treatment that patient are receiving.
- 2.4.2. Formulate appropriate drug therapy and record the outcome accurately.
- 2.4.3. Recognize and respect patients' right to information about their medicines.
- 2.4.4. Detect, manage and report adverse drug reactions.

**2.5. The graduate will have the ability to carry out practical procedures safely and effectively. *Appendix III*:**

- 2.5.1. Perform, measure and record the findings of diagnostic procedures.
- 2.5.2. Perform therapeutic procedures.
- 2.5.3. Demonstrate correct practice in general aspects of practical procedures.

**2.6. The graduate will have the ability to apply principles, method and knowledge of health informatics to medical practice:**

- 2.6.1. Keep accurate, legible and complete medical records.
- 2.6.2. Use effectively computers and other information systems, including storing and retrieving information.
- 2.6.3. Stick to the requirements of confidentiality and data protection legislation in all dealings with information.

2.6.4. Access and use effectively information sources in relation to patient care, health promotion, research and education.

**2.7. The graduate will have the ability to communicate effectively in a medical context. (Appendix III):**

- 2.7.1. Communicate clearly and sensitively with patients, their relatives or other careers, and colleagues from medical and other professions by listening, sharing and responding.
- 2.7.2. Communicate by spoken, written and electronic methods and recognize and respect significance of non-verbal communication in medical consultation.
- 2.7.3. Communicate appropriately in difficult circumstances, such as in times of disclosing bad news and discussing sensitive issues, i.e. alcohol consumption, smoking or obesity.
- 2.7.4. Communicate appropriately with difficult, violent patients and with mentally ill people.
- 2.7.5. Communicate effectively in various roles, i.e. as patient advocate, teacher, manager or improvement leader.

### **III. The Doctor as a professional**

**3.1. The graduate will apply to medical practice ethical, moral and legal principles and will be able to :**

- 3.1.1. Recognize and respect BM&DC's ethical guidance and standards and supplementary ethical guidance that describe what is expected of all doctors registered with BM&DC.
- 3.1.2. Demonstrate awareness of professional values which include excellence, altruism, responsibility, compassion, empathy, accountability, honesty and integrity, and a commitment to scientific methods.
- 3.1.3. Make the care of the patient the first concern and maintain confidentiality, respect patients' dignity and privacy and act with appropriate consent.
- 3.1.4. Respect all patients, colleagues and others regardless of their age, color, culture, disability, ethnic or national origin, gender, lifestyle, marital or parental status, race, religion or beliefs, sexual orientation or social or economic status.
- 3.1.5. Recognize patients' right to hold religious or other beliefs, and respect these when relevant to treatment options.
- 3.1.6. Know about laws and systems of professional regulation through BM & DC and others, relevant to medical practice and complete relevant certificates and legal documents and liaise with the coroner and others as appropriate
- 3.1.7. Use moral reasoning and decision-making to conflicts within and between ethical, legal and professional issues including those raised by economic constraints, commercialization of health care, and scientific advances.

**3.2. The graduate will be able to reflect, learn and teach:**

- 3.2.1. Establish the foundations for lifelong learning and continuing professional development, including a professional development portfolio containing reflections, achievements and learning needs.
- 3.2.2. Acquire, assess, apply and integrate new knowledge, learn to adapt to changing circumstances and ensure highest level of professional care to the patients.
- 3.2.3. Recognize own personal and professional limits and seek help from colleagues and supervisors as necessary.

- 3.2.4. Work with colleagues in ways that best serve the interests of patients, pass on information and hand over care, demonstrate flexibility, adaptability and a problem-solving approach.
- 3.2.5. Function effectively as a mentor and teacher, contribute to the appraisal, assessment and review of colleagues and give effective feedback.

**3.3. The graduate will be able to learn and work effectively within a multi-professional team:**

- 3.3.1. Recognize and respect the roles and expertise of health and social care professionals in the context of working and learning as a multi-professional team.
- 3.3.2. Build team capacity and positive working relationships and undertake leadership and membership roles in a multi-professional team.

**3.4. The graduate will have the ability to protect patient and improve care:**

- 3.4.1. Place patients' needs and safety at the center of the care process and deal effectively with uncertainty and change.
- 3.4.2. Know about the framework of medical practice in Bangladesh including the organization, management and regulation of healthcare provision; the structures, functions and priorities of the National Health Policy; and the roles of, and relationships between the agencies and services involved in protecting and promoting individual and population health.
- 3.4.3. Apply the principles of risk management and quality assurance to medical practice including clinical audit, adverse incident reporting and how to use the results of audit to improve practice.
- 3.4.4. Understand own personal health needs, consult and follow the advice of a qualified professional and protect patients from any risk posed by own health.
- 3.4.5. Recognize the duty to take action if a colleague's health, performance or conduct is putting patients at risk.

## Basic Information about MBBS Course

- 1. Name of the course:** Bachelor of Medicine & Bachelor of Surgery (MBBS)
- 2. Basic qualifications & prerequisite for entrance in MBBS Course:**
  - (i) HSC or equivalent with Science.(Biology, Physics, Chemistry)
  - (ii) Candidate has to secure required grade point in the SSC and HSC examinations.
- 3. Students selection procedure for MBBS course:** According to decision by the proper competent authority as per merit.
- 4. Medium of Instruction:** English
- 5. Duration:** MBBS course comprises of 5 Years, followed by mandatory logbook based rotatory internship for one year
- 6. Course structure, subject with duration and professional examination**

The MBBS course is divided into four phases.

Phase	Duration	Subjects	Examination
1 <sup>st</sup> phase	1½ years	<ul style="list-style-type: none"><li>• Anatomy</li><li>• Physiology</li><li>• Biochemistry</li></ul>	First Professional MBBS
2 <sup>nd</sup> phase	1 year	<ul style="list-style-type: none"><li>• Pharmacology &amp; Therapeutics</li><li>• Forensic Medicine &amp; Toxicology</li></ul> <p><i>Only lecture, small group teaching (practical, tutorial etc.), clinical teaching (as applicable) &amp; formative assessment will be conducted in following subjects- General Pathology part of Pathology, General Microbiology part of Microbiology, Medicine &amp; Allied subjects, Surgery &amp; Allied subjects</i></p>	Second Professional MBBS
3 <sup>rd</sup> phase	1 year	<ul style="list-style-type: none"><li>• Community Medicine &amp; Public Health</li><li>• Pathology</li><li>• Microbiology</li></ul> <p><i>Only lecture, small group teaching (practical, tutorial etc.), clinical teaching (as applicable) &amp; formative assessment be conducted in following subjects- Medicine &amp; Allied subjects, Surgery &amp; Allied subjects, Obstetrics and Gynaecology.</i></p>	Third Professional MBBS
4 <sup>th</sup> phase	1½ years	<ul style="list-style-type: none"><li>• Medicine &amp; Allied subjects</li><li>• Surgery &amp; Allied subjects</li><li>• Obstetrics and Gynaecology</li></ul>	Final Professional MBBS

*NB: All academic activities including professional examination of each phase must be completed within the specified time of the phase.*

**Special note:** After taking admission into the first year of MBBS course, a student must complete the whole MBBS course (pass the final professional MBBS examination) within 12 years timeline.

## 7. Phase wise hours distribution for teaching-learning and assessment:

1 <sup>st</sup> Phase: Hour Distribution														
Subject		Lecture (in hours)	Tutorial (in hours)	Practical (in hours)	Dissection and others (in hours)	Integrated teaching	Formative Exam		Summative exam		Total (in hours)			
							Prepa ratory leave	Exam time	Prepa ratory leave	Exa m time				
Teaching-learning, both formative and summative assessment	Anatomy	115	53	52	307	36 hrs	35 days	42 days	30 days	30 days	527			
	Physiology	120	120	97	-						337			
	Biochemistry	117	100	100	-						317			
	Total	352	273	249	307	36	77 days		60 days		1181+36 (IT) =1217			
Generic Topics on Medical Humanities : (i) Behavioral science, (ii) Medical Sociology, (iii) Etiquette in using of Social Medias, (iv) Self- directed learning including team learning & (v) Medical ethics will be taught within 1 <sup>st</sup> phase.										8				
<b>Grand Total</b>											1225			
Time for integrated teaching, examination, preparatory leave of formative & summative assessment is common for all subjects of the phase														
Related behavioral, professional & ethical issues will be discussed in all teaching learning sessions														

2 <sup>nd</sup> Phase: Hour Distribution												
Subject		Lecture (in hours)	Tutorial (in hours)	Practical/ Demonstration (in hours)	Others (in hours)	Integrated teaching (IT) (in hours)	Clinical bedside teaching (in weeks)	Formative Exam		Summative exam		Total (in hours)
								Prepa ratory leave	Exam time	Prepa ratory leave	Exa m time	
Teaching-learning, both formative & summative assessment	Pharmacology & Therapeutics	100	30	50	Clinical Pharmacology 15	17	-	10 days	15 days	10 days	15 days	195
	Forensic Medicine & Toxicology	100	45	40 hrs Visit to Morgue, Thana & court = 12 days	-		-					185+12days
	General Pathology	35	40	07	-	-	-	-	-	-	-	82
	General Microbiology	13	07	15	-	-	-	-	-	-	-	35
Teaching, learning and only formative assessment	Medicine & Allied subjects	28	-	-	-	-	21 weeks	-	-	-	-	28
	Surgery & Allied subjects	35	-	-	-	-	20 weeks	-	-	-	-	35
<b>Total</b>		311 hrs	122 hrs	112 hrs + 12 days	15 hours	17 hours	41 weeks	25 days		25 days		560 hrs + 12 days
<b>Grand Total</b>		<b>577 hrs + 12 days</b>					42 weeks	45 days				560 +17 (IT) = 577 hrs + 12 days

Generic Topics on Medical Humanities: (i) Communication skill, (ii) Doctor-patient relationship (DPR) & Physicians'/bedside manner, etiquette and rapport building with patients will be taught within 2 <sup>nd</sup> phase.										(iii)	5 hrs
Time for integrated teaching, examination preparatory leave and formative and summative assessment is common for all subjects of the phase											
Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.											
Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions											

### 3<sup>rd</sup> Phase: Hour Distribution

Subject		Lecture (in hours)	Tutorial (in hours)	Practical/ Demonstration (in hours)	Integrated teaching (in hours)	Clinical bedside teaching (in weeks)	Formative Exam		Summative exam		Total (in hours)								
							Prepa ratory leave	Exam time	Prepa ratory leave	Exam time									
Teaching- learning and only formative assessment	Community Medicine & Public Health	110	155	COME (community based medical education): 30 days (10 days day visit + 10 days RFST +10 days study tour)= <b>30 days</b> (10+10+10)	18	-	07 days	12 days	07 days	12 days	265 + 30 days								
	Pathology	60	54	27							141								
	Microbiology	87	38	30							155								
Medicine & Allied subjects	48	-	-	-	14	-	-	-	-	-	48								
Surgery & Allied subjects	103	-	-	-	15	-	-	-	-	-	103								
Obstetrics and Gynaecology	30	-	-	-	8	-	-	-	-	-	30								
<b>Total</b>	438	247	57 hours + 30 days	18 hrs	37 weeks	19 days	19 days	19 days	19 days	19 days	<b>631</b>								
<b>Grand Total</b>	760 hrs + <b>30 days</b>				37 weeks	38 days				742+18(IT) = <b>760 hrs</b> + <b>30 days</b>									
<b>Generic Topics on Medical Humanities:</b> (i) Integrity and accountability of medical professionals (ii) Aspects of a good doctor will be taught within 3 <sup>rd</sup> phase.											3 hrs								
<i>Time for integrated teaching, examination preparatory leave and formative and summative assessment is common for all subjects of the phase</i>																			
Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.																			
Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions																			

### 4<sup>th</sup> Phase : Hour Distribution

Subject		Lecture (in hours)	Small group teaching (in hours)	Departmental integrated teaching (in hours)	Common hours for phase integrated teaching	Clinical teaching (in weeks)	Block posting (in weeks)	Formative Exam		Summati ve exam		Total (in hours)									
								Preparatory leave	Exam time	Preparatory leave	Exam time										
Teaching- learning, both formative & summative assessment	Medicine & Allied subjects	153	199	20	126	24	4	Preparatory leave 10 days	Exam time 15days	Preparatory leave 10 days	Exam time 30days	372									
	Surgery & Allied subjects	186	134	22		24	4					342									
	Obstetrics and Gynaecology	60	58	20		08	4														
<b>Total</b>		399	391	62	126	56wks	12 wks	25 days	40 days	25 days	40 days	852									
<b>Grand Total</b>		978 hours				68 wks		65 days		65 days		852+126 (IT)=978									
<b>Generic Topics on Medical Humanities:</b> (i) Medical professionalism, (ii) Inter-professionalism & (iii) Patient Safety & Medical Error will be taught within 4 <sup>th</sup> phase.											5 hrs										
<i>Time for integrated teaching, examination preparatory leave and formative and summative assessment is common for all subjects of the phase</i>																					
Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.																					
Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions																					

<b>Generic Topics on Medical Humanities for Internship Period:</b> (i) White coat ceremony, (ii) Career planning & (iii) Continuing Medical Education (CME), Continuing Professional Development (CPD) & Infection Control Practice (ICP)	10 hrs
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## Medicine & Allied Subjects: hour distribution in 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> phases in details

Subject	Lecture (in hours)				Small group teaching (in hours)	Departmental integrated teaching (in hours)	Phase integrated teaching (in hours)	Clinical/Bedside teaching (in weeks)			Total weeks	Block posting (in weeks)	Formative examination (in days)	Summative examination (in days)	
	2 <sup>nd</sup> Phase	3 <sup>rd</sup> Phase	4 <sup>th</sup> Phase	Total				2 <sup>nd</sup> Phase	3 <sup>rd</sup> Phase	4 <sup>th</sup> Phase					
Internal medicine	22	25	90	137	PBL, Practical demonstration , Instrumental demonstration, Skill lab, Tutorial & etc.	(10 topics ×2 hours) = 20 hours	(42 topics × 3 hours) = 126 hours	14	06+ 2 (OPD)	12	34	04 wks	Preparatory leave-10 days Exam time-15days	25 days	40 days
Psychiatry	02	-	18	20				-	02	03	05				
Dermatology	-	-	17	17				-	02	03	05				
Pediatrics	04	20	22	46				04	-	06	10				
Transfusion medicine	-	03	-	03				01	-	-	01				
Physical Medicine	-	-	04	04				02	-	-	02				
Nuclear Medicine	-	-	02	02				-	-	-	-				
Emergency	-	-	-	-				-	02	-	02				
Total	28	48	153	229	199	20	126 hours	21	14	24	59	04 wks	25 days	40 days	65 days
Grand Total	448 hours							126 hours	63 weeks						
<p><i>Time for integrated teaching, examination preparatory leave and formative &amp; summative assessment is common for all subjects of the phase</i></p> <p>Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.</p> <p>Related behavioral, professional &amp; ethical issues will be discussed in all clinical and other teaching learning sessions</p>															

## Medicine & Allied Subjects: hour distribution for Clinical/Bedside teaching in 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> phases in details

Subject	Clinical/Bedside & Ambulatory care teaching (in hours)						Total hours (in three phases)	Total weeks  {(2 <sup>nd</sup> phase wks + 3 <sup>rd</sup> phase wks + 4 <sup>th</sup> phase wks = Total three phases wks) × (6 days × 4 or 2 hours)}		
	2 <sup>nd</sup> Phase		3 <sup>rd</sup> Phase		4 <sup>th</sup> Phase					
	Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching					
	Morning	Evening	Morning	Evening	Morning	Evening				
	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency				
	21 weeks		14 weeks		28 weeks					
Internal medicine	168 h (14w)	168 h (14w)	96 h (8w)	96 h (8w)	144 h (12w)	144 h (12w)	816 h	{14+(6+2)+12}= 34 w× (6 days × 4 hrs)		
Psychiatry	-	-	24 h (2w)	24 h (2w)	36 h (3w)	36 h (3w)	120 h	(0+2+3)= 05 w× (6 days × 4 hrs)		
Dermatology	-	-	24 h (2w)	24 h (2w)	36 h (3w)	36 h (3w)	120 h	(0+2+3)= 05 w× (6 days × 4 hrs)		
Pediatrics	48 h (4w)	48 h (4w)	-	-	72 h (6w)	72 h (6w)	240 h	(4+0+6)= 10 w × (6 days × 4 hrs)		
Transfusion medicine	12 h (1w)	-	-	-	-	-	12 h	(1+0+0)= 01 w× (6 days × 2 hrs)		
Physical Medicine	24 h (2w)	-	-	-	-	-	24 h	(2+0+0)= 02 w × ( 6days × 2hrs)		
Emergency	-	-	24 h (2w)	24 h (2w)	-	-	48 h	(0+2+0)= 02 w × ( 6days × 4hrs)		
Block posting	-	-	-	-	48 h (4w)	48 h (4w)	96 h	(0+0+4)= 04 w × ( 6days × 4hrs)		
<b>Total</b>	<b>252 hrs</b>	<b>216 hrs</b>	<b>168 hrs</b>	<b>168 hrs</b>	<b>336 hrs</b>	<b>336 hrs</b>	<b>1476 hrs</b>	<b>63 weeks</b>		

## Surgery & Allied Subjects: Hour distribution in 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> phases in details

Subject	Lecture (in hours)				Small group teaching (in hours)	Departmental integrated teaching (in hours)	Phase integrated teaching (in hours)	Clinical/Bedside teaching (in weeks)			Total weeks	Block posting (in weeks)	Formative examination (in days)	Summative examination (in days)				
	2 <sup>nd</sup> Phase	3 <sup>rd</sup> Phase	4 <sup>th</sup> Phase	Total				2 <sup>nd</sup> Phase	3 <sup>rd</sup> Phase	4 <sup>th</sup> Phase								
General surgery	35	30	60	125				15	01	07	23							
Orthopaedic surgery	-	15	45	60				02	04	04	10							
Radiology	-	-	05	05				01	-	-	01							
Radiotherapy	-	-	08	08				-	01	-	01							
Anesthesia	-	10	-	10				01	-	-	01							
Neurosurgery	-	-	05	05				-	01	-	01							
Pediatric surgery	-	05	10	15				-	-	02	02	04 wks						
Urology	-	05	10	15				-	-	02	02							
Burn & Plastic surgery/ Emergency & Casualty	-	-	05	05				-	-	01	01							
Dentistry	-	-	-	-				01			01							
Ophthalmology	-	38		38				-	04	04	08							
Otolaryngology	-	38		38				-	04	04	08							
Total	324				134	22	126 hrs	20	15	24	59 wks	04 wks	25 days	40 days				
<b>Grand Total</b>	<b>480 hours</b>						<b>126 hrs</b>				<b>63 weeks</b>		<b>65 days</b>					
<i>Time for integrated teaching, examination preparatory leave and formative &amp; summative assessment is common for all subjects of the phase</i>																		
<i>Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.</i>																		
<i>Related behavioral, professional &amp; ethical issues will be discussed in all clinical and other teaching learning sessions</i>																		

## Surgery & Allied Subjects: Hours distribution for Clinical/Bedside teaching in 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> phases in details

Subject	Clinical/Bedside & Ambulatory care teaching (in hours)						Total weeks (in three phases)	
	2 <sup>nd</sup> Phase		3 <sup>rd</sup> Phase		4 <sup>th</sup> Phase			
	Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching			
	Morning	Evening	Morning	Evening	Morning	Evening		
	Indoor/ OPD/ Emergency & Casualty	Indoor/ Emergency & Casualty	Indoor/ OPD/ Emergency & Casualty	Indoor/ Emergency & Casualty	Indoor/ OPD/ Emergency & Casualty	Indoor/ Emergency & Casualty		
	20 weeks		15 weeks		28 weeks			
General surgery	180 h (15w)	180 h (15w)	12 h (1w)	12 h (1w)	84 h (7w)	84 h (7w)	552 h (15+01+07) = 23 w × (6 days × 4 hrs)	
Orthopaedic surgery	24 h (2w)	24 h (2w)	48 h (4w)	48 h (4w)	48 h (4w)	48 h (4w)	240 h (2+4+4) = 10 w × (6 days × 4 hrs)	
Radiology	12 h (1w)	-	-	-	-	-	12 h (1+0+0) = 01 w × (6 days × 2 hrs)	
Radiotherapy	-	-	12 h (1w)	-	-	-	12 h (0+1+0) = 01 w × (6 days × 2 hrs)	
Anesthesia	12 h (1w)	12 h (1w)	-	-	-	-	24 h (1+0+0) = 01 w × (6 days × 4 hrs)	
Neurosurgery	-	-	12 h (1w)	12 h (1w)	-	-	24 h (0+1+0) = 01 w × (6 days × 4 hrs)	
Pediatric surgery	-	-	-	-	24 h (2w)	24 h (2w)	48 h (0+0+2) = 02 w × (6 days × 4 hrs)	
Urology	-	-	-	-	24 h (2w)	24 h (2w)	48 h (0+0+2) = 02 w × (6 days × 4 hrs)	
Burn & Plastic surgery/ Emergency & Casualty	-	-	-	-	12 h (1w)	12 h (1w)	24 h (0+0+1) = 01 w × (6 days × 4 hrs)	
Dentistry	12 h (1w)	-	-	-	-	-	12 h (1+0+0) = 01 w × (6 days × 2 hrs)	
Ophthalmology	-	-	48 h (4w)	48 h (4w)	48 h (4w)	48 h (4w)	192 h (0+4+4) = 08 w × (6 days × 4 hrs)	
Otolaryngology	-	-	48 h (4w)	48 h (4w)	48 h (4w)	48 h (4w)	192 h (0+4+4) = 08 w × (6 days × 4 hrs)	
Block posting	-	-	-	-	48 h (4w)	48 h (4w)	96 h (0+0+4) = 04 w × (6 days × 4 hrs)	
<b>Total</b>	<b>240 hrs</b>	<b>216 hrs</b>	<b>180 hrs</b>	<b>168 hrs</b>	<b>336 hrs</b>	<b>336 hrs</b>	<b>1476 hrs</b> <b>63 weeks</b>	

## Obstetrics & Gynaecology: Hours distribution in 3<sup>rd</sup> & 4<sup>th</sup> phases in details

Lecture (in hours)				Small group teaching (in hours)  PBL, Practical demonstration , Instrumental demonstration, Skill lab, Tutorial & etc.	Departmental integrated teaching (in hours)	Phase integrated teaching (in hours)	Clinical/Bedside teaching (in weeks)		Block posting (in weeks)	Formative examination (in days)		Summative examination (in days)				
3 <sup>rd</sup> Phase	4 <sup>th</sup> Phase	Total	3 <sup>rd</sup> Phase				4 <sup>th</sup> Phase	Preparatory leave 10 days		Exam time 15 days	Preparatory leave 10 days	Exam time 15 days				
							8wks	8wks								
Total	30	60	90	58 hours	(10 topics × 2 hours) = 20 hours	(42 topics × 3 hours) = 126 hours	16 weeks	04 wks	25 days	40 days						
<b>Grand Total</b>	<b>168 hours</b>				<b>126 hours</b>		<b>20 weeks</b>		<b>65 days</b>							
<i>Time for integrated teaching, examination preparatory leave and formative &amp; summative assessment is common for all subjects of the phase</i>																
Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.																
Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions																

## Obstetrics & Gynaecology: Hours distribution for Clinical/Bedside teaching in 3<sup>rd</sup> & 4<sup>th</sup> phases in details

Subject	Clinical/Bedside & Ambulatory care teaching (in hours)						Total hours (in three phases)	Total weeks  {(2 <sup>nd</sup> phase wks + 3 <sup>rd</sup> phase wks + 4 <sup>th</sup> phase wks = Total three phases wks ×(6 days× 4 or 7 hours)}		
	2 <sup>nd</sup> Phase		3 <sup>rd</sup> Phase		4 <sup>th</sup> Phase					
	Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching					
	Morning	Evening	Morning	Evening	Morning	Evening				
	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency				
			8 weeks		12 weeks					
Basic Clinical Skills (in-patient)	-	-	48 h (4w)	48 h (4w)	-	-	96 h	(0+4+0)= <b>04</b> w × (6 days × 4 hrs)		
Family Planning Clinic	-	-	24 h (2w)	24 h (2w)	-	-	48 h	(0+2+0)= <b>02</b> w × (6 days × 4 hrs)		
Gynae & Antenatal Out-patient Clinic	-	-	24 h (2w)	24 h (2w)	-	-	48 h	(0+2+0)= <b>02</b> w × (6 days × 4 hrs)		
Routine Obstetrics	-	-	-	-	36 h (3w)	36 h (3w)	72 h	(0+0+3)= <b>03</b> w × (6 days × 4 hrs)		
Routine Gynaecology	-	-	-	-	36 h (3w)	36 h (3w)	72 h	(0+0+3)= <b>03</b> w × (6 days × 4 hrs)		
Emergency Obstetric Care E.O.C (Labour Room)	-	-	-	-	24 h (2w)	60 h (2w)	84 h	(0+0+2)= <b>02</b> w × (6 days × 7 hrs)		
Block posting	-	-	-	-	48 h (4w)	48 h (4w)	96 h	(0+0+4)= <b>04</b> w × (6 days × 4 hrs)		
<b>Total</b>	<b>-</b>	<b>-</b>	<b>96 hrs</b>	<b>96 hrs</b>	<b>144 hrs</b>	<b>180 hrs</b>	<b>516 hrs</b>	<b>24 weeks</b>		

## 8. Teaching & learning methods

The following teaching and learning methods will be followed:

Large Group Teaching:

- Lecture
- Seminar

Integrated teaching : 102 topics

- Phase I : 12 topics
- Phase II: 7 topics
- Phase III: 10 topics
- Phase IV: Common 42 topics + Departmental 31 topics = 73 topics
  - (*Departmental topics Medicine 10 topics + Surgery 11 topics + Gynae & Obs 10 topics*)

Small Group Teaching:

- Problem Based Learning (PBL)
- Tutorial
- Demonstration
- Students interaction

Practical session:

- Use of practical manual
- Performing the task/examination by the student
- Writing the practical note book

Field Placement (Community based medical education):

- In small groups for performing activities by the student themselves

Clinical teaching:

- In ward, OPD, ED, ambulatory care teaching, OT, POW, ICU, etc.
- By concerned persons

NB: Ambulatory care teaching, there should be a ratio of 1:4 (25% ambulatory care teaching and 75% indoor teaching).

Encourage to learn ICT through computer lab of the college.

## 9. Assessment:

- A. There will be in-course/formative (item/card/term) and end-course/summative (professional) assessment for the students in each phase (1st, 2<sup>nd</sup>, 3rd & 4<sup>th</sup> phase) of the course i.e. formative and professional examination.
- B. Formative assessment will be done through results of items, card and term ending examination, weightage from integrated teaching & class attendance.
- C. For formative assessment, 10% marks of written examination of each paper of each subject is allocated
- D. In written examination for MCQ of each paper, 20% marks are allocated. Out of that Single based answer (SBA) type of MCQ will be 50% and Multiple true false (MTF) type of MCQ 50% in formative and summative assessment of all subjects of MBBS course. There will be separate answer script for MCQ part of examination. Total number of MCQ will be 20 for 20 marks out of which 10marks for SBA and 10marks for MTF.

E. Short Answer Question (SAQ) and Structured Essay Question (SEQ) will be in written examination of each paper, 70% marks are allocated. Out of 70 marks Structured essay question (SEQ) will be around 25% along with short answer question (SAQ) around 75% in formative and summative assessment of all subjects of MBBS course

F. Oral part of the examination will be Structured Oral examination (SOE)

G. OSPE/OSCE will be used for assessing skills/competencies. Traditional long & short cases will be also used for clinical assessment

H. There will be phase final professional examination within the each academic phase.

I. Results will be published as per following GPA system with the provision of reflection of marks in the academic transcript

**Proposal 1:**

<b>Numerical percentage of Marks</b>	<b>GPA letter Grade</b>	<b>GPA Numerical Grade (Grade points)</b>
85% and above	A <sup>+</sup>	4
75% to less than 85%	A	3.75
65% to less than 75%	A <sup>-</sup>	3.5
61% to less than 65%	B <sup>+</sup>	3.25
60% to less than 61%	B	3.00
Less than 60%	F	0

(Source : UGC)

**Proposal 2:**

<b>Numerical percentage of Marks</b>	<b>GPA letter Grade</b>	<b>GPA Numerical Grade (Grade points)</b>
85% and above	A <sup>+</sup>	4
81% to less than 85%	A	3.75
76% to less than 80%	A <sup>-</sup>	3.5
71% to less than 75%	B <sup>+</sup>	3.25
66% to less than 70%	B	3.00
61% to less than 65%	B <sup>-</sup>	2.75
Only 60%	C	2.50
Less than 60%	F	0

**J. Eligibility for appearing in the professional examination:**

- Certificate from the respective head of departments regarding students obtaining at least 75% attendance in all classes (theory, practical, tutorial, residential field practice, clinical placement etc.) during the phase.
- Obtaining at least 60% marks in formative examinations.
- No student shall be allowed to appear in the professional examinations unless the student passes in all the subjects of the previous professional examinations

**K. Pass Marks:**

Pass marks is 60%. Student shall have to pass written (SBA & MTF-MCQ +SEQ+ SAQ + formative), oral, practical and clinical examination separately.

## L. Examinations & distribution of marks:

### First Professional Examination

Subjects	Written Exam marks	Structured Oral Exam marks	Practical Exam marks	Formative Exam marks	Total Marks
Anatomy	180	150	150	20	500
Physiology	180	100	100	20	400
Biochemistry	180	100	100	20	400
Total					1300

### Second Professional Examination

Subjects	Written Exam marks	Structured Oral Exam marks	Practical Exam marks	Formative Exam marks	Total Marks
Pharmacology & Therapeutics	90	100	100	10	300
Forensic Medicine	90	100	100	10	300
Total					600

### Third Professional Examination

Subjects	Written Exam marks	Structured Oral Exam marks	Practical Exam marks	Formative Exam marks	Total Marks
Community Medicine & Public Health	90	100	100	10	300
Pathology	90	100	100	10	300
Microbiology	90	100	100	10	300
Total					900

### Fourth Professional Examination

Subjects	Written Exam marks	Structured Oral Exam marks	Clinical	Practical	Formative Exam marks	Total Marks
Medicine & Allied Subject	180	100	100	100	20	500
Surgery & Allied Subject	180	100	100	100	20	500
Obstetrics & Gynecology	180	100	100	100	20	500
Total						1500

## M. Common Rules for Examinations

- a) University professional MBBS examination will be started from May and November.
- b) University professional MBBS examinations will be completed within the specified time of the concerned phase
- c) No carry on system before passing 1<sup>st</sup> professional examination. Students who will appear first professional examination can attend the clinical class before publishing results of first professional examination. If any student fail any subject of first phase in the first professional examination he/she will not be able to continue clinical and other classes of second phase before passing first professional examination.
- d) After passing all the subjects of first professional MBBS examination, students can appear in Second professional MBBS examination if all other prerequisites for appearing in second professional examination are fulfilled as per curriculum.
- e) To appear in third professional MBBS examination students will have to pass all the subjects of the second professional MBBS examination and all other prerequisites for appearing in Third Professional MBBS examination must be fulfilled as per curriculum.
- f) To appear in 4<sup>th</sup> (final) professional MBBS examination students have to pass all the subjects of previous 3<sup>rd</sup> professional MBBS examination if all other prerequisites are fulfilled. In the mean time students can attend clinical ward placement, teaching learning.

#### **N. Few directives and consensus about the following issues of assessment:**

- i. Incase of OSPE/OSCE- Instruments/equipment's to be taken to oral boards to ask open questions to the students apart form Structured Oral Examination (SOE). There will be scope of instruments related viva, specially in clinical subjects and where applicable. Central OSPE/OSCE from Dean Office after moderation will be encouraged.
- ii. Incase of Structured Oral Examination (SOE), instead of preparing specific structured question, topics will be fixed considering wide range of contents coverage. Rating scale will be used for marking the students concurrently. Each student will be asked questions from all topics of the set. Equal or average duration of time will be set for every student.

#### **10. Internship :**

- I. After passing final professional MBBS examination students have to enroll for one year log book based mandatory rotatory internship programme. Internship programme will be more structured and supervised. It is compulsory to complete MBBS course & one year supervised internship programme to get permanent registration for doing independent practice.
- II. MBBS graduates must join internship within one month after passing the final professional MBBS examination. Exception can be considered based on the only valid personal medical ground upon approval of the Director of the Medical College Hospital;
- III. Within one year (12 months) of internship period 11 months at respective medical college hospital and one month at Upazila Health Complex (UHC)/field level.
- IV. Timeline of completion of internship will be two years once after joining internship. i.e. it must be completed within two years from the starting date. Exception can be considered based on the only valid personal medical ground upon approval of the Principal of respective Medical College and Director of Medical College Hospital;

### **Generic Topics on Medical Humanities to be Taught in MBBS Course**

The following sixteen generic topics on medical humanities will be taught within 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> Phase of MBBS course & Internship period under supervision of the concerned Phase coordination committee in collaboration with medical education unit (MEU). The sessions will be under the guidance of Principal & Vice-principal, coordinated by concerned departments and sessions will be delivered by concerned experts of the topics. Each session will be one and half hour. Attending these session will be mandatory and will be reflected in the formative & summative assessment.

#### **Topics to be taught in Phase-I**

1. Behavioral science
2. Medical Sociology
3. Etiquette in using of Social Medias
4. Self- directed learning including team learning
5. Medical ethics

#### **Topics to be taught in Phase-II**

1. Communication skill
2. Doctor-patient relationship (DPR)
3. Physicians' bedside manner, etiquette and rapport building with patients

#### **Topics to be taught in Phase-III**

1. Integrity and accountability of medical professionals
2. Aspects of good doctors

#### **Topics to be taught in Phase-IV**

1. Medical professionalism
2. Inter-professionalism
3. Patient Safety

#### **Issues for Internship Period**

1. White coat ceremony
2. Career planning
3. Continuing Medical Education (CME) & Continuing Professional Development (CPD)
4. Causes of death
5. Basic Infection Control Practice (ICP)

### **Integrated Teaching in Phase I**

Teachers of all departments of Phase -1 (Anatomy, Physiology & Biochemistry) must be present during these integrated sessions along with the concerned faculties those are mentioned in the column four in the table below. Teachers will be the speakers/facilitators in each session. The students must actively participate in these sessions and have to submit the summary of each session to the concerned teacher/department as their assignments. This assignment will be a part of practical note book in the summative assessment. Students need to get some 'take home message' from every session. Schedule for integrated teaching session will be set at the phase I committee meeting in collaboration with medical education unit (MEU).

Total 36 hour. Each session will be for 3 hour

**A) Term-I:**

1. Coronary artery disease
2. Chronic obstructive pulmonary disease (COPD)
3. Anaemia

**B) Term-II:**

4. Diarrhea
5. Diabetes Mellitus (DM)
6. Jaundice
7. Electrolyte imbalance
8. Proteinuria

**C) Term-III:**

9. Thyroid disorder
10. Cerebro-vuscular disease (CVD)
11. Deafness
12. Errors of refraction

### **Integrated Teaching in Phase II**

All the departments of Phase II (Pharmacology, Forensic Medicine & Toxicology) must be present and take part in the integrated teaching while the faculty representatives from concerned clinical & others departments will also participate actively. Teachers will be the speakers in each session. Participation of the students of phase II should be ensured. Concern audiovisual aid, equipment and patient will be used. Students need to get some 'take home message' from every session. To ensure presence of the students 10 (Ten) marks will be allocated from practical part of the professional examination as a part of integrated teaching and submission of write up on what was learned by the student as summary. Schedule for integrated teaching session will be set at the phase II committee meeting in collaboration with medical education unit (MEU).

**Total -17 hour.** Each session will be for at least 2 hour

1. Electrocution and lightening
2. Burn
3. Drowning
4. Death
5. Poisoning
6. Substance abuse
7. Pulmonary Tuberculosis
8. Malaria

### **Integrated Teaching in Phase III**

All the departments of Phase III (Community Medicine & Public Health, Pathology, Microbiology) must be present and take part in the integrated teaching while the faculty representatives from concerned clinical & others departments will also participate actively. Teachers will be the speakers in each session. Participation of the students of phase III should be ensured. Students need to get some 'take home message' from every session. To ensure presence of the students Schedule for integrated

teaching session will be set at the phase III committee meeting in collaboration with medical education unit (MEU).

Total -18 hour. Each session will be for at least 2 hour

**Topics:**

1. Occupational and Environmental hazard
2. Snake bite
3. Transportation injuries
4. Disaster management
5. Shock
6. Glomerulonephritis
7. Rheumatoid Arthritis/ Osteomyelitis
8. Different Viral Fevers (Covid-19, Dengue, Chikungunya)
9. Carcinoma Cervix

**Integrated Teaching In Phase IV**

All the departments of phase iv (Medicine & allied Topics, Surgery & Allied Topics and Gynecology & Obstetrics) must be present and take part in the integrated teaching while the faculty representatives from concerned clinical and other departments will also participate actively. Teachers will be the speakers in each session. Participation of the students of phase IV should be ensured. Students need to get some take home message from every session. To ensure presence of the students 10 (ten) marks will be allocated from practical part of the professional examination as a part of integrated teaching and submission of write up on what was learned by the student as summary. Schedule of integrated teaching session will be set at the phase IV committee meeting in collaboration with medical education unit (MEU).

Each session will be for at least 3 hours

**Topics :**

1. Hypertension	22. Low Back Pain
2. Tuberculosis	23. Joint Pain
3. Thyroid Disorder	24. Osteoporosis
4. Acute Kidney Injury(AKI)	25. Acute abdomen
5. Fever	26. Thrombophlebitis/Phlebothrombosis
6. Oedema	27. Sepsis
7. Chest pain	28. Infection Prevention & Control
8. Acute respiratory distress	29. Shock
9. DM	30. Fluid and Electrolytes-
10. Jaundice	31. Burn
11. Diarrhea and vomiting	32. Per rectal bleeding-
12. Nutrition	33. Vertigo
13. Pediatric Emergency	34. Congenital anomalies
14. Headache	35. Wound infection
15. Anxiety	36. Urinary Tract Infection (UTI)
16. Depression	37. AUB
17. Psychosis	38. Convulsion
18. Drug reaction	39. Abdominal Lump
19. Generalised pruritus	40. Anaemia
20. Purpura	41. Unconsciousness
21. STI	42. Delirium & Dementia

## **Medicine & Allied Subjects Departmental Integrated Teaching- Phase-IV**

Medicine and Allied subjects of phase IV will organize the departmental integrated teaching on the following topics where faculty members of internal medicine and concerned allied subjects must be present and take part in the integrated teaching. While the faculty representatives from concerned clinical and other departments will also participate actively. Teachers will be the speakers in each session. Participation of the students of phase IV should be ensured. Students need to get some take home message from every session. To ensure presence of the students few marks will be allocated from practical part of the professional examination as a part of integrated teaching and submission of write up on what was learned by the student as summary. Schedule of the departmental integrated teaching session will be set by the department in coordination with the phase IV committee.

Each session will be for at least 2 hours

### **Topics :**

1. Heart Failure
2. Congenital Heart Disease
3. Bronchial Asthma
4. Liver Abscess
5. Malabsorption syndrome
6. Irritable bowel syndrome( IBS )
7. Psoriasis
8. Leprosy
9. Autism spectrum disorder ( ASD )
10. Somatoform disorder

## **Surgery & Allied Subjects: Departmental Integrated Teaching- Phase-IV**

Surgery and Allied subjects of phase IV will organize the departmental integrated teaching on the following topics where faculty members of General Surgery and concerned allied subjects must be present and take part in the integrated teaching. While the faculty representatives from concerned clinical and other departments will also participate actively. Teachers will be the speakers in each session. Participation of the students of phase IV should be ensured. Students need to get some take home message from every session. To ensure presence of the students few marks will be allocated from practical part of the professional examination as a part of integrated teaching and submission of write up on what was learned by the student as summary. Schedule of the departmental integrated teaching session will be set by the department in coordination with the phase IV committee.

Each session will be for at least 2 hours

### **Topics :**

1. Malignant Bone Tumour
2. Inflammatory Bowel Disease
3. Gastric Outlet Obstruction
4. Sub acute Intestinal obstruction
5. Neck Swelling
6. Epistaxis
7. Stridor in Children
8. Bladder Outflow Obstruction
9. Metabolic Bone Disease
10. Spinal Injury.
11. Proptosis

## **Obstetric & Gynecology : Departmental Integrated Teaching-Phase-IV**

Obstetric & Gynecology of phase IV will organize the departmental integrated teaching on the following topics where faculty members of Obstetric & Gynecology and concerned other subjects must be present and take part in the integrated teaching. Teachers will be the speakers in each session. Participation of the students of phase IV should be ensured. Students need to get some take home message from every session. To ensure presence of the students few marks will be allocated from practical part of the professional examination as a part of integrated teaching and submission of write up on what was learned by the student as summary. Schedule of the departmental integrated teaching session will be set by the department in coordination with the phase IV committee.

Each session will be for at least 2 hours

### **Topics :**

1. Pelvic Inflammatory Disease (PID)
2. Vaginal Discharge
3. Ovarian Tumour
4. Contraceptives
5. Pelvic tuberculosis
6. Normal labour
7. Antenatal care
8. Vital statistics (maternal & perinatal mortality)
9. Puerperium
10. Puberty