



MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

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Curriculum for Third M.B.B.S – Part II General Surgery

Amended upto BOM 62/2020, Dated 16/09/2020

Amended History

1. Approved as per BOM–04/2007, Item No. 4, Dated 14/12/2007
2. Amended upto BOM 43/2015, Resolution No. 4.7, Dated 06/11/2015.
3. Amended upto BOM 45/2016, Resolution No. 3.4 (c), Resolution No. 3.4 (d), Dated 28/04/2016.
4. Amended upto BOM 46/2016, Resolution No. 1 (v), Dated 11/08/2016.
5. Amended upto BOM 48/2017, Resolution No. 59(b), dated 24/01/2017.
6. Amended upto BOM 51/2017, Resolution No. 1.3.9.7, Resolution No. 1.3.9.9, Resolution No. 1.3.9.10, Resolution No. 1.3.10.8, Resolution No. 1.3.10.13; Resolution No. 1.3.10.9, Resolution No. 1.3.21; Resolution No. 1.3.7.5; Dated 28/08/2017.
7. Amended upto BOM 52/2018, Resolution No. 3.5.9, Resolution No. 3.8.4, Resolution No. 3.8.5; Dated 13/01/2018.
8. Amended upto BOM 53/2018, Resolution No. 4.3.5 Dated 19/05/2018
9. Amended upto BOM 55/2018, Resolution No. 4.13, Resolution No. 4.5.4.3, Dated 27/11/2018.
10. Amended upto BOM 57/2019, Resolution No. 3.1.4.2; Dated 26/04/2019.
11. Amended upto BOM 62/2020 [Resolution No 3.2.4.5], Dated 16/09/2020.

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GENERAL CONSIDERATIONS AND TEACHING APPROACH

- (1) Graduate medical curriculum is oriented towards training students to undertake the responsibilities of a physician of first contact who is capable of looking after the preventive, promotive, curative & rehabilitative aspect of medicine.
- (2) With wide range of career opportunities available today, a graduate has a wide choice of career opportunities. The training, though broad based and flexible should aim to provide an educational experience of the essentials required for health care in our country.

“Training should be able to meet internationally acceptable standards.”

- (3) To undertake the responsibilities of service situations which is a changing condition and of various types, it is essential to provide adequate placement training tailored to the needs of such services as to enable the graduates to become effective instruments of implementation of those requirements. To avail of opportunities and be able to conduct professional requirements, the graduate shall endeavour to have acquired basic training in different aspects of medical care.
- (4) The importance of the community aspects of health care and of rural health care services is to be recognized. This aspect of education & training of graduates should be adequately recognized in the prescribed curriculum. Its importance has been systematically upgraded over the past years and adequate exposure to such experiences should be available throughout all the three phases of education & training. This has to be further emphasized and intensified by providing exposure to field practice areas and training during the internship period. The aim of the period of rural training during internship is to enable the fresh graduates to function efficiently under such settings.
- (5) The educational experience should emphasize health and community orientation instead of only disease and hospital orientation or being concentrated – on - curative - aspects. As such all the basic concepts of modern scientific medical education are to be adequately dealt with.
- (6) There must be enough experiences to be provided for self learning. The methods and techniques that would ensure this must become a part of teaching - learning process.
- (7) The medical graduate of modern scientific medicine shall endeavour to become capable of functioning independently in both urban and rural environment. He/she shall endeavour to give emphasis on fundamental aspects of the subjects taught and on common problems of health and disease avoiding unnecessary details of specialization.
- (8) The importance of social factors in relation to the problem of health and diseases should receive proper emphasis throughout the course and to achieve this purpose, the

educational process should also be community based than only hospital based. The importance of population control and family welfare planning should be emphasized throughout the period of training with the importance of health and development duly emphasized.

- (9) Adequate emphasis is to be placed on cultivating logical and scientific habits of thought, clarity of expression and independence of judgment, ability to collect and analyze information and to correlate them.
- (10) The educational process should be placed in a historic background as an evolving process and not merely as an acquisition of a large number of disjointed facts without a proper perspective. The history of Medicine with reference to the evolution of medical knowledge both in this country and the rest of the world should form a part of this process.
- (11) Lectures alone are generally not adequate as a method of training and are a poor means of transferring/acquiring information and even less effective at skill development and in generating the appropriate attitudes. Every effort should be made to encourage the use of active methods related to demonstration and on firsthand experience. Students will be encouraged to learn in small groups, through peer interactions so as to gain maximal experience through contacts with patients and the communities in which they live. While the curriculum objectives often refer to areas of knowledge or science, they are best taught in a setting of clinical relevance and hands on experience for students who assimilate and make this knowledge a part of their own working skills.
- (12) The graduate medical education in clinical subjects should be based primarily on out-patient teaching, emergency departments and within the community including peripheral health care institutions. The out-patient departments should be suitably planned to provide training to graduates in small groups.
- (13) Clinics should be organized in small groups of preferably not more than 10 students so that a teacher can give personal attention to each student with a view to improve his skill and competence in handling of the patients.
- (14) Proper records of the work should be maintained which will form the basis for the students' internal assessment and should be available to the inspectors at the time of inspection of the college by the Medical Council of India.
- (15) Maximal efforts have to be made to encourage integrated teaching between traditional subject areas using a problem based learning approach starting with clinical or community cases and exploring the relevance of various preclinical disciplines in both understanding and resolution of the problem. Every attempt be made to de-emphasize compartmentalization of disciplines so as to achieve both horizontal and vertical integration in different phases.

- (16) Every attempt is to be made to encourage students to participate in group discussions and seminars to enable them to develop personality, character, expression and other faculties which are necessary for a medical graduate to function either in solo practice or as a team leader when he begins his independent career. A discussion group should not have more than 20 students.
- (17) Faculty member should avail of modern educational technology while teaching the students and to attain this objective, Medical Education Units/ Departments be established in all medical colleges for faculty development and providing learning resource material to teachers.
- (18) To derive maximum advantage out of this revised curriculum, the vacation period to students in one calendar year should not exceed one month, during the 4 ½ years Bachelor of Medicine and Bachelor of Surgery (MBBS) Course.
- (19) In order to implement the revised curriculum in Toto, State Govts. and Institution Bodies must ensure that adequate financial and technical inputs are provided.
- (20) HISTORY OF MEDICINE –The students will be given an outline on “History of Medicine”. This will be taught in an integrated manner by subject specialists and will be coordinated by the Medical Education Unit of the College.
- (21) All medical institutions should have curriculum committee which would plan curricula and instructional method which will be regularly updated.
- (22) Integration of ICT in learning process will be implemented.

OBJECTIVE OF MEDICAL GRADUATE TRAINING PROGRAMME:

- (1) **NATIONAL GOALS** : At the end of undergraduate program, the medical student should be able to :
 - (a) Recognize 'health for all' as a national goal and health right of all citizens and by undergoing training for medical profession fulfill his/her social obligations towards realization of this goal.
 - (b) Learn every aspect of National policies on health and devote himself / herself to its practical implementation.
 - (c) Achieve competence in practice of holistic medicine, encompassing promotive, preventive, curative and rehabilitative aspects of common diseases.
 - (d) Develop scientific temper, acquire educational experience for proficiency in profession and promote healthy living.
 - (e) Become exemplary citizen by observation of medical ethics and fulfilling social and professional obligations, so as to respond to national aspirations.
- (2) **INSTITUTIONAL GOALS:** (1) In consonance with the goals each medical institution should evolve institutional goals to define the manpower (or professionals) they intend to produce. The undergraduate students coming out of a medical institute should:
 - (a) Be competent in diagnosis and management of common health problems of the individual and the community, commensurate with his/her position as a member of the health team at the primary, secondary or tertiary levels, using his/her clinical skills based on history, physical examination and relevant investigations.
 - (b) Be competent to practice preventive, promotive, curative and rehabilitative medicine in respect to the commonly encountered health problems.
 - (c) Appreciate rationale for different therapeutic modalities; be familiar with the administration of the "essential drugs" and their common side effects.
 - (d) Be able to appreciate the socio-psychological, cultural, economic and environmental factors affecting health and develop humane attitude towards the patients in discharging one's professional responsibilities.
 - (e) Possess the attitude for continued self learning and to seek further expertise or to pursue research in any chosen area of medicine, action research and documentation skills.
 - (f) be familiar with the basic factors which are essential for the implementation of the National Health Programmes including practical aspects of the following:-
 - (i) Family Welfare and Material and Child Health(MCH)
 - (ii) Sanitation and water supply

- (iii) Prevention and control of communicable and non-communicable diseases
 - (iv) Immunization
 - (v) Health Education
 - (vi) IPHS standard of health at various level of service delivery, medical waste disposal.
 - (vii) Organizational institutional arrangements.
-
- (g) Acquire basic management skills in the area of human resources, materials and resource management related to health care delivery, General and hospital management, principal inventory skills and counseling
 - (h) Be able to identify community health problems and learn to work to resolve these by designing, instituting corrective steps and evaluating outcome of such measures.
 - (i) Be able to work as a leading partner in health care teams and acquire proficiency in communication skills.
 - (j) Be competent to work in a variety of health care settings.
 - (k) Have personal characteristics and attitudes required for professional life such as personal integrity, sense of responsibility and dependability and ability to relate to or show concern for other individuals.

All efforts must be made to equip the medical graduate to acquire the skills as detailed as under:

A comprehensive list of skills recommended as desirable for Bachelor of Medicine and Bachelor of Surgery (MBBS) Graduate:

1. Clinical Evaluation:

- (a) To be able to take a proper and detailed history.
- (b) To perform a complete and thorough physical examination and elicit clinical signs.
- (c) To be able to properly use the stethoscope, Blood Pressure, Apparatus Auroscope, Thermometer, Nasal Speculum, Tongue Depressor, Weighing Scales, Vaginal Speculum etc.:
- (d) To be able to perform internal examination-Per Rectum (PR), Per Vaginum (PV) etc.
- (e) To arrive at a proper provisional clinical diagnosis.

II. Bed side Diagnostic Tests:

- (a) To do and interpret Haemoglobin (HB), Total Count (TC), Erythrocytic Sedimentation Rate (ESR), Blood smear for parasites, Urine examination /albumin /sugar /ketones /microscopic:
- (b) Stool exam for ova and cysts;
- (c) Gram, staining and Siehl-Nielsen staining for AFB;
- (d) To do skin smear for lepra bacilli
- (e) To do and examine a wet film vaginal smear for Trichomonas
- (f) To do a skin scraping and Potassium Hydroxide (KOH) stain for fungus infections;
- (g) To perform and read Montoux Test.

III. Ability to Carry Out Procedures:

- (a) To conduct CPR (Cardiopulmonary resuscitation) and First aid in newborns, children and adults.
- (b) To give Subcutaneous (SC) /Intramuscular (IM) /Intravenous (IV) injections and start Intravenous (IV) infusions.
- (c) To pass a Nasogastric tube and give gastric leavage.
- (d) To administer oxygen-by masic/catheter
- (e) To administer enema
- (f) To pass a ruinary catheter-male and female
- (g) To insert flatus tube
- (h) To do pleural tap, Ascitic tap & lumbar puncture
- (i) Insert intercostal tube to relieve tension pneumothorax
- (j) To control external Haemorrhage.

IV Anaesthetic Procedure

- (a) Administer local anaesthesia and nerve block

- (b) Be able to secure airway potency, administer Oxygen by Ambu bag.

V Surgical Procedures

- (a) To apply splints, bandages and Plaster of Paris (POP) slabs;
- (b) To do incision and drainage of abscesses;
- (c) To perform the management and suturing of superficial wounds;
- (d) To carry on minor surgical procedures, e.g. excision of small cysts and nodules, circumcision, reduction of paraphimosis, debridement of wounds etc
- (e) To perform vasectomy;
- (f) To manage anal fissures and give injection for piles.

VI Mechanical Procedures

- (a) To perform thorough antenatal examination and identify high risk pregnancies.
- (b) To conduct a normal delivery;
- (c) To apply low forceps and perform and suture episiotomies;
- (d) To insert and remove IUD's and to perform tubectomy

VII Paediatrics

- (a) To assess new borns and recognize abnormalities and I.U. retardation
- (b) To perform Immunization;
- (c) To teach infant feeding to mothers;
- (d) To monitor growth by the use of 'road to health chart' and to recognize development retardation;
- (e) To assess dehydration and prepare and administer Oral Rehydration Therapy (ORT)
- (f) To recognize ARI clinically;

VIII ENT Procedures:

- (a) To be able to remove foreign bodies;
- (b) To perform nasal packing for epistaxis;
- (c) To perform trachesotomy

IX Ophthalmic Procedures:

- (a) To invert eye-lids;
- (b) To give Subconjunctival injection;
- (c) To perform appellation of eye-lashes;
- (d) To measure the refractive error and advise correctional glasses;
- (e) To perform nasolacrimal duct syringing for potency

X. Dental Procedures:

To perform dental extraction

XI Community Healthy:

- (a) To be able to supervise and motivate, community and para-professionals for corporate efforts for the health care;
- (b) To be able to carry on managerial responsibilities, e.g. Management of stores, indenting and stock keeping and accounting
- (c) Planning and management of health camps;
- (d) Implementation of national health programmes;
- (e) To effect proper sanitation measures in the community, e.g. disposal of infected garbage, chlorination of drinking water;
- (f) To identify and institute and institute control measures for epidemics including its proper data collecting and reporting.

XII Forensic Medicine Including Toxicology

- (a) To be able to carry on proper medico legal examination and documentation of injury and age reports.
- (b) To be able to conduct examination for sexual offences and intoxication;
- (c) To be able to preserve relevant ancillary material for medico legal examination;
- (d) To be able to identify important post-mortem findings in common un-natural deaths.

XIII Management of Emergency

- (a) To manage acute anaphylactic shock;
- (b) To manage peripheral vascular failure and shock;
- (c) To manage acute pulmonary oedema and LVF;
- (d) Emergency management of drowning, poisoning and seizures
- (e) Emergency management of bronchial asthma and status asthmaticus;
- (f) Emergency management of hyperpyrexia;
- (g) Emergency management of comatose patients regarding airways, positioning prevention of aspiration and injuries
- (h) Assess and administer emergency management of burns

**Syllabus for
GENERAL SURGERY**

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BROAD CURRICULUM AS PER MCI GUIDELINES (GENERAL SURGERY)

i) GOAL:

The broad goal of the teaching of undergraduate students in Surgery is to produce graduates capable of delivering efficient first contact surgical care.

ii) OBJECTIVES:

a. KNOWLEDGE:

At the end of the course, the student should be able to:

1. Describe aetiology, pathophysiology, principles of diagnosis and management of common surgical problems including emergencies, in adults and children.
2. Define indications and methods for fluid and electrolyte replacement therapy including blood transfusion.
3. Define asepsis, disinfection and sterilization and recommended judicious use of antibiotics.
4. Describe common malignancies in the country and their management including prevention.
5. Enumerate different types of anaesthetic agents, their indications, mode of administration, contraindications and side effects.

b. SKILLS:

At the end of the course, the student should be able to:

1. Diagnose common surgical conditions both acute and chronic, in adult and children.
2. Plan various laboratory tests for surgical conditions and interpret the results.
3. Identify and manage patients of hemorrhagic, septicemic and other types of shock.
4. Be able to maintain patent air-way and resuscitate
 - i) a critically injured patient
 - ii) patient with cardio-respiratory failure
 - iii) a drowning case
5. Monitor patients of head, chest, spinal and abdominal injuries, both in adults and children.
6. Provide primary care for a patient of burns.
7. Acquire principles of operative surgery, including pre-operative, operative and post operative care and monitoring.
8. Treat open wounds including preventive measures against tetanus and gas gangrene.
9. Diagnose neonatal and pediatric surgical emergencies and provide sound primary care before referring the patient to secondary/tertiary centres.
10. Identify congenital anomalies and refer them for appropriate management.

In addition to these he should have observed/assisted/ performed the following:

1. Incision and drainage of abscess
2. Debridement and suturing open wound
3. Venesection
4. Excision of simple cyst and tumours
5. Biopsy of surface malignancy
6. Catheterisation and nasogastric intubation
7. Circumcision
8. Meatotomy
9. Vasectomy
10. Peritoneal and pleural aspirations
11. Diagnostic proctoscopy
12. Hydrocele operation
13. Endotracheal intubation
14. Tracheostomy and cricothyroidotomy
15. Chest tube insertion.

(c) INTEGRATION:

The undergraduate teaching in surgery should be integrated at various stages with different pre and para and other clinical departments.



**MAHATMA GANDHI MISSION'S
MEDICAL COLLEGE, & HOSPITAL**
Sector – 18, Kamothe, Navi Mumbai- 410209
Tel. 27422459, 27421723, Fax, 91- 22-7420320

Date: 15.09.2015

Dr. Ashok A. Kalyanshetti

HOD-Surgery

MGM Medical College, & Hospital Kamothe.

Navi Mumbai.

To,

The Registrar,

MGMHHS,

Kamothe, Navi Mumbai.

Dear Sir,

As per your requirement following is the Theory syllabus topic wise for each Semesters.

Theory Class Time Table IV Semester (1st Feb – 31st July) 21 classes
Dept. of General Surgery Time: 8.30am. to 9.30am.

Sr. No.	Topic
01	Introduction of Surgery with history
02	Body's response to injury & Shock
03	Monitoring
04	Monitoring of surgical patient & Fluid and electrolyte balance
05	Haemostasis and blood transfusion
06	Polytrauma <i>Nice To Know</i>
07	Types wounds and wound healing
08	Missiles and their effects & blast injuries
09	Management of war wounds <i>Desirable To Know</i>
10	Acute infections
11	Chronic specific infections
12	Surgical diseases skin conditions
13	Burns <i>Nice To Know</i>
14	Tetanus and gas gangrene

15	Surgical Nutrition <i>Nice To Know</i>
16	Neoplasms: general considerations
17	Principals of treatment of malignant tumours
18	Minimally invasive surgery <i>Nice To Know</i> * (NOTES)
19	Organ transplantation <i>Nice To Know</i>
20	Principal of Radiotherapy pre Prep. & P O care
21	OT Tech & Sepsis/ Anatsptic

*NOTES = Natural Orifice Transluminal Endoscopic Surgery

Theory Class Time Table V Semester (1st Aut – 31st Jan) 21 classes

Dept. of General Surgery Time: 8.30am. to 9.30am.

Sr. No.	Topic
01	Symptomatology & Investigations of Urinary system <i>Desirable To Know</i>
02	Injuries of urinary tract
03	Infections of urinary & perinephric abscess
04	Urinary Lithiasis
05	Hydronephrosis
06	Genitor urinary tuberculosis
07	Tumours of the Kidney & Tumours of the bladder/ diseases of Bladder
08	Retention of urine & diseases of the prostate gland
09	Diseases of tests & epididymic
10	Hydrocele
11	Disease of penis; Carcinoma penis.
12	Endoscopy in Urology, Renal transplantation
13	Renal failure
14	Symptomatology & investigations of vascular disease
15	Peripheral vascular disease & Acute limb ischaemia
16	Arterial injuries <i>Desirable To Know</i>
17	Surgery of Aneurysms of Aorta & other vassels
18	Cold injuires
29	Varicose veins & Deep vein thrombosis & plum embolism
20	Disease of the lymphatic vessels & disease of the lymph nodes
21	Surgically correctable hypertension <i>Nice To Know</i>

Theory Class Time Table VI Semester (1st Feb – 31st July) 21 classes

Dept. of General Surgery Time: 8.30am. to 9.30am.

Sr. No.	Topic
01	Surgical consideration in Amoebiasis & enteric fever
02	Filariasis, Dracontiasis & ascariasis & Hydatid disease <i>Desirable To Know</i>
03	Leprosy, Madure foot, Tropical ulcer Actionomycosis
04	Management of burns <i>Desirable To Know</i>
05	Skin grafting
06	Injuries of the hand & Infection of the hand
07	Injuries of the face incl maxillofacial injuries <i>Nice To Know</i>

08	Cleft lip & cleft palate Desirable to Know
09	Lymphoedema
10	Cosmetic surgery
11	Digit & limb reimplantation
12	Scope of plastic & reconstructive surgery
13	Swelling of the neck
14	Disease of thyroid glands
15	Disease of parathyroid glands and thymus
16	Disease of salivary glands
17	Tumours of the adrenal gland
18	Disease of the breast
19	Swelling of the jaw
20	Oral cavity- tongue- lip, cheek
21	Disease of the breast

Theory Class Time Table VII Semester (1st Aug – 31st Jan) 20 classes
Dept. of General Surgery Time: 8.30am. to 9.30am.

Sr. No.	Topic
01	Abdominal wall & umbilicus
02	Groin hernias
03	Ventral hernia incl incisional hernia
04	Acute peritonitis & subphrenic abscess
05	Abdominal tuberculosis
06	Peptic ulcer
07	Gastric neoplasms
08	Islet cell tumours of the pancreas
09	Surgery of the spleen
10	Crohn's disease & ulcerative colitis
11	Diverticular disease of GIT Desirable To Know
12	Acute abdomen
13	Acute appendicitis
14	Ac intestinal obstruction/Type
15	Bleeding per rectum
16	Tumours of the colon & rectum/Disease anal canal
17	Prolapsed rectum, haemorrhoids, fissure-in-ano
18	Abdominal injuries Desirable To Know
19	Paediatric abdominal emergencies
20	Anorectal abscess & fistulae-in -ano

Theory Class Time Table VIII Semester (1st Feb – 31st July) 20 classes
Dept. of General Surgery Time: 8.30am. to 9.30am.

Sr. No.	Topic
01	Injuries of the chest <i>Desirable To Know</i>
02	Lung abscess, bronchiectasis & pulm TB
03	Tumours of the lung & bronchial tree
04	Mediastinal tumours <i>Desirable To Know</i>
05	Diaphragmatic hernia & trachea-oesophageal fistula
06	Dysphagia/Achalasia/Hiatus Hernia
07	Carcinoma oesophagus
08	Congenital heart disease
09	Surgery of ischaemic heart disease <i>Desirable To Know</i>
10	Disease of pericardium
11	Cardiac arrest
12	Liver abscess
13	Tumours of the liver
14	Portal hypertension
15	Haematemesis & malaena
16	Surgically obstructive jaundice
17	Disease of the gall bladder & biliary tree
18	Acute and chronic pancreatitis. Pancreatic pseudocysts
19	Tumours of the pancreas & periampullary carcinoma
20	Acquired of ischaemic heart disease <i>Nice To Know</i>

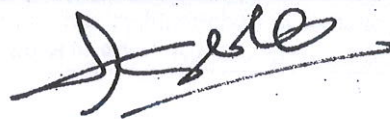
Theory Class Time Table IX Semester (1st Aug – 31st Jan) 32 classes
Dept. of General Surgery Time: 8.30am. to 9.30am.

Sr. No.	Topic
01	Head injury
02	Intracranial abscess and vascular malformation
03	Intracranial tumours and other ICSOL
04	Congenital anomalies of brain & spinal cord <i>Desirable To Know</i>
05	Surgery of the spinal cord <i>Desirable To Know</i>
06	Surgery of peripheral nerves
07	Paraplegia
08	Skin & soft tissue
09	Lymphatic system
10	Mouth, jaws, pharyns & salivary glands
11	Neck, thyroid & parathyroid glands
12	Breast
13	Heart. Lung pleura, mediastinum
14	Oesophagus
15	Stomach & duodenum

16	Intestinal obstruction, peritoneum, mesentery
17	Small gut, colon, rectum, anal canal
18	Liver, gall bladder & bile ducts
19	Pancreas, spleen
20	Pituitary, adrenal, MEN
21	Kidney & ureter
22	Bladder & prostate, testes
23	Brain, spinal cord, spinal cervical rib <i>Desirable To Know</i>
24	Peripheral vascular disease
25	Modern anaesthesia introduction & historical review, <i>Nice To Know</i>
26	Pre-op assessment, preparation & premedication
27	General anaesthesia and gases used in anaesthesia
28	Volatile anaesthetics IV anaesthetics and muscle relaxants
29	Spinal and local anaesthesia
30	Endotracheal anaesthesia and respiratory resuscitation
31	Post operative care, oxygen therapy and cardio-pulmonary
32	Resuscitation /critical care Anaesthesia.

Thanking you,

Yours sincerely,



Dr. Ashok A. Kalyanshetti

Head of Department of Surgery



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III MBBS Part -II Surgery Examination Pattern
Dept. of General Surgery

There will be Two papers of surgery(includes Orthopaedics) Paper I & II will have 2 Sections.

PAPER -I (General Surgery + Orthopaedics) Total 60 marks
General surgery Paper -I

Section : I (Total 30 marks)

Topics: -

1. General surgery (including vascular & lymphatic system)
2. Head, Face & Neck (including thyroid)
3. CNS
4. Anaesthesia
5. Radiology
6. Dentistry

a) Multiple choice Question	(10 marks)	10
b) LAQ's (1 out of 2)	(08 marks)	08
c) Short notes (3 out of 4)	(4x3= 12 marks)	12

Section : II (Orthopaedics) (Total 30 marks)

a) Multiple choice Question	(10 marks)	10
b) LAQ's (1 out of 2)	(08 marks)	08
c) Short notes (3 out of 4)	(4x3=12 marks)	12

Total 60 Marks

PAPER -II

General Surgery paper -II

Section : I

Topic :- (GIT)

a) Multiple choice Question	(10 marks)	10
b) LAQ's (1 out of 2)	(08 marks)	08
c) Short notes (3 out of 4)	(4x3=12 marks)	12

Section : II

Topics:

- a) GUT
- b) Breast
- c) Chest & Thoracic

b) Multiple choice Question	(10 marks)	10
c) LAQ's (1 out of 2)	(08 marks)	08
d) Short notes 3 out of 4	(4x3=12 marks)	12

Total 60 Marks

PRACTICAL

Surgery (Long case)	50 marks	50
Short case 1 (Surgery)	25 marks	25
Short case 2 (Ortho)	25 marks	25


VIVA

Surgery Viva 4 Table	40 marks	40
Viva (Ortho)	10 marks	10

(INTERNAL ASSESSMENT MARKS TOTAL 30 MARK)

- Surgery	(20 marks)	20
- Orthopaedics	(10 marks)	10

Total Marks for surgery 300 marks



Dr. A. Kalyashetti
Head of Department of Surgery

Cc to: Director
Dean

ANNEXTURE I

MGM INSTITUTE OF HEALTH SCIENCES, NAVI MUMBAI

THIRD MBBS (PART-II) UNIVERSITY EXAMINATIONS PATTERN

SURGERY

Paper I - 3 hrs - 60 marks

Section A - MCQ - 30 x ½ marks each – 15 marks 30 minutes
Separate paper Single based response
MCQ will cover whole syllabus of Paper I

Section B - General Surgery 25 Marks

2 LAQS – 8 marks x 2 = 16 marks
3/5 SAQS – 3 marks = 9 marks

Topics - General principles of Surgery, Oncology, head, face, neck, Breast, Endocrine Surgery and Trauma..

NB : Shall contain one question on basic Sciences and allied subjects.

Section C –Orthopedics Surgery : 20 marks

1 LAQS (Long answer questions) – 8 marks
4/6 SAQS(Short answer questions) x 3 marks each = 12 marks

PAPER II - Time 3 hrs - 60 marks

Section A - MCQ - 30 x ½ marks – 15 marks 30 minutes
MCQ will cover whole syllabus of Paper II

Section B – Marks: 25 marks

Topics :Gastrointestinal Tract including colon rectum and anal canal Liver, pancreas and Biliary tract, Spleen, Paediatric surgery.

2 LAQS – 8 marks x 2 = 16 marks
One question clinical Problem solving.
3/5 SAQS – 3 marks = 9 marks

NB : Shall contain one question on basic Sciences and allied subjects

Section . C – Marks: 20 marks

Topics: Urology, Cardio thoracic surgery and plastic surgery Dental surgery, Radiology and Radiotherapy, Anaesthesiology.

1 LAQS – 8 marks
4/6 SAQS x 3 marks each = 12 marks

ANNEXTURE - II

MGM INSTITUTE OF HEALTH SCIENCES, NAVI MUMBAI
MARKSHEET FOR CLINICAL / PRACTICAL AND VIVA - VOCE EXAMINATION
THIRD MBBS - PART - II

EXAMINATION CENTRE : MGM MEDICAL COLLEGE,

Subject : General Surgery including Orthopedics

DISTRIBUTION OF MARKS PRACTICAL/CLINICAL (100)

<p>Long Case = 50 Marks History = 10, Ilicitating clinical Signs & Clinical Exam = 15, Investigation = 5, Diagnosis = 10, Management = 10</p>	<p>Short Case-I (Surgery) 25 Marks Ilicitating Clinical Signs = 10, Investigations and Dignosis, 10, management = 5</p>
<p>Short Case-II (Ortho) 25 Marks Ilicitating Clinical Signs = 10, Investigations and Dignosis, 10, management = 5</p>	<p>Inst. + Operation = 5, X-ray = 5, Surgical Pathology = 5, Inst. X-ray, Spec., = 5</p>

Seat No	Long Case				Short Case-I (Surgery)		Total 2	Short Case-II (Ortho)			Total 3 <small>(1+2+3)</small> Max : 100 Min = 50	Viva Table A			Viva Table B			VIVA TOTAL 20 MARKS
	10	15	5	10	10	10		10	10	5		5	5	5	5	Inst	Oper.	

Name of Convener :	Name of Examiner	College Name	Signature with Date
Name of Internal			
Name of External :			
Name of External :			

Approved in Bom -43/2015, Dated 06/11/2015

Resolution No. - 4.7

Resolution No. 4.7 of BOM-43/2015:

(a) Resolved for UG (MBBS) courses 6 examiners (3 externals and 3 internals) will be invited during practical examination. While 4 (2+2) will take practical's, 2(1+1) will be utilized for evaluation of written papers during the day. They will be rotated by the convener/senior most examiners every day.

Approved in BOM - 45/2016, Dated 28/04/2016
Resolution No. - 3.4 (c)

Resolution No. 3.4(c): Resolved to accept revised method to calculate internal assessment marks for following subjects:

OBGY & Surgery: for the batch starting their VI semester in Feb 2017.

Theory:

	OBGY	General Surgery
VI th / VIII th Sem. & Prelim Exam.	15	20
Day to day assessment as per MCI norms	05	10
Total marks	20	30

Practical:

	OBGY.	General Surgery
VI th / VIII th Sem. & Prelim Exam.	15	20
Day to day assessment as per MCI norms	05	10
Total marks	20	30

Resolution passed in BOM – 48/2017, dated 24/01/2017

Item No. 5.9: BOS (Surgery and Allied) dated 21.09.2016

b) Structured ALS/BLS course

BOM has already adopted following resolution on this matter:

Resolution No. 3.4(d) of BOM-45/2016 dt. 28/04/2016: As ALS/BLS is already included in the syllabus of MBBS/PG courses, hence there is no need to have separate structured programme.

Resolution No. 1(v) of BOM-46/2016 dt. 11/08/2016: Resolved to include 01 additional page in the Intern's log book indicating that the Students have undergone ALS/BLS training.

After deliberations on both the above resolutions, following resolution is adopted:

Resolution No. 5.9(b): It is resolved that as ALS/BLS is already a part of the syllabus of MBBS/PG courses, it is not necessary to have a separate structured programme for ALS/BLS. However looking at its importance, it becomes essential to retrain UG and PG students, therefore, it is also resolved to certify the interns and PG students during their internship and PG training respectively by incorporating a certificate of completion in the Intern's log book/PG log book indicating that the Students have undergone ALS/BLS training. This training can be imparted by Department of Emergency Medicine/Anaesthesia. This will be effective from the batch of internship during 2017 and PG batch of academic year 2015-16.

Resolution No. 1.3.9.7 of BOM-51/2017:

- i) Resolved that authorities must strictly monitor internship and the required skills to be gained must be recorded in the log book properly and based on the scoring, internship completion can be given after deciding the competency of the interns.
- ii) Further Teachers must help students in preparation for NEET PG exam during internship wherever possible.

Resolution No. 1.3.9.9 of BOM-51/2017: Resolved that Clinical posting during MBBS can be modified or shifted in between semesters as per needs abiding MCI norms.

Resolution No. 1.3.9.10 of BOM-51/2017: Resolved that University Examination section must provide hard copy/CD of Syllabus which is categorized in Must Know (60%), Nice to know (30%) and Desirable to know (10%) to all paper setters so that the same can be reflected in the question papers.

Resolution No. 1.3.10.8 of BOM-51/2017: Resolved to allot 7 days from Surgery clinical rotation in 8th semester for Anesthesia, in the MBBS curriculum for Anesthesiology, which will be utilized for training in:

- Cardio-pulmonary resuscitation on mannequin
- Anesthesia machine
- Airway equipment
- Emergency drugs

This is to be effective for batch entering in 8th Semester from February 2018 onwards.

Resolution No. 1.3.10.13 of BOM-51/2017: Resolved to:

- i) Approve the Integrated teaching topics as mentioned below for OBGY, Surgery & ENT, with immediate effect:

Surgery:

1. Peptic ulcer
2. Thyroid
3. Breast
4. Salivary gland
5. Shock
6. Blood and blood transfusion
7. Liver
8. Hematemesis
9. Urinary retention

Resolution No. 1.3.10.9 of BOM-51/2017: Resolved to approve the following pattern for Internal Assessment calculation for MBBS with effective from batch entering into III/II & III/I from February 2018 onwards:

Surgery:

Theory		Practical	
6 th semester(60)	} reduced to 20 marks	6 th semester(60)	} reduced to 20 marks
8 th semester(60)		8 th semester(60)	
Prelims (120)		Prelims (120)	

Resolution No. 13.21 of BOM-51/2017: Resolved to implement the Graduate/Intern Medical Outcome **Annexure XLI**



MGM INSTITUTE OF HEALTH SCIENCES, NAVI MUMBAI

Graduate Attributes

Graduate attributes are the qualities, skills and understandings a university community agrees its students should develop during their time with the institution. These attributes include but go beyond the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. They are qualities that also prepare graduates as agents of social good in an unknown future.

(Bowden *et al*, 2000)

A student graduating from MGM Institute of Health Sciences, Navi Mumbai, should attain the following attributes:

- 1 • **Dynamic professionalism**
- 2 • **Exemplary leadership**
- 3 • **Effective communication skills**
- 4 • **Scholarly attitude**
- 5 • **Element of critical thinking**
- 6 • **Enthusiasm for research**
- 7 • **Social commitment**
- 8 • **Global competencies**

Dynamic Professionalism:

Abide by professional codes of conduct, demonstrate high personal standards of behavior, be considerate, trustworthy and honest, act with integrity. Apply effective strategies to maintain their own physical, psychological, social and spiritual well-being. Should be able to apply profession-specific knowledge, clinical skills and professional attitudes in implementation of evidence-based protocols for optimal outcome.

Exemplary leadership:

Focuses on the qualities required to effectively manage a career, as a practitioner or academician, work effectively within a system aiming at quality improvement, fostering a spirit of team-building.

Effective communication skills:

Communicates effectively and humanely with all stakeholders, their families, colleagues, through a variety of means, gathers and conveys information respectfully, in a culturally acceptable and dignified manner.

Scholarly attitude:

Demonstrates a lifelong commitment to reflective learning, strives to maintain professional competence. Committed to learn, disseminate, apply and translate knowledge.

Element of critical thinking:

Will develop a habit of inquiry, use the knowledge gained for dealing with complex situations, foster an ambience conducive for effective learning with constructive criticism, exercise critical judgement in evaluating sources of information.

Enthusiasm for research:

Develop intellectual curiosity and embark upon opportunities to develop research capabilities. Imbibe the basic principles of research methodology and engage in ethical research.

Social commitment:

Inculcate values of self-awareness, empathy, mutual respect. Understand our obligation to society and foster an ability to work in a diverse cultural setting. Understand how ones' actions can enhance the well-being of others.

Global competencies:

Team-building, communication, self-management, collaborative working, openness and respect for a range of perspectives.

Competencies for a medical graduate

Sr. No.	Competency
	General
1.	Obtaining a written and informed consent
2.	Hand washing and surgical scrubbing
3.	Universal safety precautions
4.	Infection control strategies
5.	Biomedical waste management
	Diagnosis
6.	Measurement of body temperature
7.	Measurement of pulse and blood pressure
8.	Venepuncture
9.	Management of blood samples
10.	Taking blood cultures
11.	Measurement of blood glucose
12.	Managing an ECG monitor and correct interpretation of tracing
13.	Basic respiratory function tests
14.	Urine multi dipstick test
15.	Educating patients regarding collection of mid-stream urine sample
16.	Taking nose, throat and skin swabs
17.	Assessment of nutritional status
18.	Pregnancy testing
	Treatment
19.	Administering oxygen
20.	Securing a peripheral intravenous access, setting up an infusion and use of infusion devices
21.	Use of drugs for parenteral administration
22.	Dosage and administration of Insulin and use of sliding scales
23.	Subcutaneous and intramuscular injections
24.	Blood transfusion
25.	Male and female urinary catheterization
26.	Use of local anaesthetics
27.	Skin suturing
28.	Basic wound care and dressings
29.	Educating patients regarding use of devices for inhaled medications
30.	Correct methods for safe transfer / handling of patients in context of clinical care

Prof. Dr. Siddharth P. Dubhashi
Director (Academics)

Resolution No. 3.5.9 of BOM-52/2018:

a) BOM reiterated the earlier BOM resolution as mentioned below:

Resolution No. 1.3.7.5 of BOM-51/2017: It was resolved that

- i) In all the subjects of all courses, MCQ weightage (Section A) shall be a maximum of 20% of the total marks in each paper.
- ii) BOS will have to accordingly workout the changes in Section B & C weightage and put up in forthcoming BOS meeting.
- iii) Further University Examination section must validate the MCQ Question Bank by Faculties before giving it to question paper-setter.

b) To be effective from:

- (i) Ist MBBS - Batch appearing in University August/September 2018 examination onwards.
- (ii) IInd MBBS - Batch appearing in University January 2019 examination onwards.
- (iii) IIIrd MBBS (Part I) and IIIrd MBBS (Part II) - Batch appearing in University January 2019 examination onwards.

Resolution No. 3.8.4 of BOM-52/2018: Resolved the following for MBBS, with effect from batch appearing in University January 2019 examination onwards:

Surgery: (Paper I & II)

- Section A: MCQs: 24 x 0.5 marks = 12 marks
- Section B: LAQs: 1x 10 marks = 10 marks
SAQs: 6 (out of 7) x 3 marks = 18 marks
- Section C: (Ortho): LAQ: 1x10 = 10 marks
SAQ: 2(out of 3) x5 marks = 10 marks

Total = 60 Marks each paper

Resolution No. 3.8.5 of BOM-52/2018: Resolved to accept the below mentioned topics for integrated teachings in MBBS for Orthopedics, Ophthalmology, Radiology and Anesthesia:

III. Anesthesia:

1. Anatomy: Anatomy of Larynx, Anatomy of Spinal Cord
2. Physiology: Pulmonary function tests
3. Pediatrics: Neonatal resuscitation, APGAR Score
4. Pathology: Blood transfusion
5. OBGY: Labour anesthesia
6. Radiology: Anesthesia for MRI

Resolution No. 3.8.4 of BOM-52/2018: Resolved the following for MBBS, with effect from batch appearing in University January 2019 examination onwards:

Surgery: (Paper I & II)

- Section A: MCQs: 24 x 0.5 marks = 12 marks
- Section B: LAQs: 1x 10 marks = 10 marks
SAQs: 6 (out of 7) x 3 marks = 18 marks
- Section C: (Ortho): LAQ: 1x10 = 10 marks
SAQ: 2(out of 3) x5 marks = 10 marks

Total = 60 Marks each paper

* In Paper I out of 24 MCQ (Section A), 04 MCQ will be from Orthopaedics.

Resolution No. 4.3.5 of BOM-53/2018: Resolved to add reference book entitled “ESSENTIAL IN RESPIRATORY MEDICINE” by Dr. S.H. Talib in the UG/PG curriculum in medicine and allied subjects

Resolution No. 4.5.4.3 of BOM-55/2018: Resolved to include the following lectures in the UG curriculum (8th Semester Lecture Program) for Surgery, to be implemented from batch entering into 8th semester in Feb. 2019 onwards:

- (i) Basics of Endoscopy and its applications in Surgery.
- (ii) Basics of Laparoscopy Surgery

Resolution No. 4.13 of BOM-55/2018: Resolved as follows:-

- (i) Slow learners must be re-designated as potential learners.
- (ii) Students scoring less than 35% marks in a particular subjects/course in the 1st formative exam are to be listed as potential learners. These learners must be constantly encouraged to perform better with the help of various remedial measures.
- (iii) Students scoring more than 75% marks in a particular subjects/course in the 1st formative exam are to be listed as advanced learners. These learners must be constantly encouraged to participate in various scholarly activities.

Resolution No. 3.1.4.2 of BOM-57/2019:

- i.** Resolved to include “Gender Sensitization” into UG (from new batch 2019-2020) and PG (from existing batches) curricula. [**Annexure-21**]
- ii.** Resolved to align the module of “Gender Sensitization” with MCI CBME pattern for MBBS students.
- iii.** Resolved that Dr. Swati Shiradkar, Prof., Dept. of OBGY., MGM Medical College, Aurangabad will coordinate this activity at both campuses.

Annexure - 21

Gender sensitization for UG (2nd , 3rd , 8th semesters) and PG (3 hours)

INCLUSION OF “ GENDER SENSATIZATION” IN CURRICULUM

Introduction :

The health care provider should have a healthy gender attitude, so that discrimination, stigmatization, bias while providing health care will be avoided. The health care provider should also be aware of certain medico legal issues related with sex & gender.

Society particularly youth & adolescents need medically accurate, culturally & age wise appropriate knowledge about sex, gender & sexuality. So we can train the trainers for the same. It is need of the hour to prevent sexual harassment & abuse .

To fulfill these objectives, some suggestions are there for approval of BOS.

Outline

- 1)For undergraduates :- Three sessions of two hours each, one in 2nd term, one in 3rd term & one in 8th term.
- 2)For Faculties and postgraduates :- One session of two hrs .
- 3)For those want to be trainers or interested for their ownself, value added course, which is optional about sex, gender, sexuality & related issues.

Responsibility

ICC of MGM, MCHA , with necessary support from IQAC & respective departments.

Details of undergraduate sessions

1)First session in 2nd term

Aim – To make Students aware about the concept of sexuality & gender.

To check accuracy of knowledge they have,

To make them comfortable with their own gender identify & related issues.

To make them aware about ICC & it is functioning.

Mode – Brain storming , Interactive power point presentation experience sharing.

Duration – Around two hours

Evaluation – Feedback from participants.

2)Second session in 3rd / 4th term

Aim – To ensure healthy gender attitude in these students as now they start interacting with patients.

To ensure that the maintain dignity privacy while interacting with patients and relatives, particularly gender related.

To make them aware about importance of confidentiality related with gender issues.

To encourage them to note gender related issues affecting health care & seek solutions.

Mode – focused group discussions on case studies, Role plays & discussion.

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Duration – Around two hours.

Evaluation – Feedback from participants.

Third session in 8th term.

Aim – To understand effect of gender attitudes on health care in various subjects.

To develop healthy gender attitude while dealing with these issues.

Mode – Suggested PBL by departments individually. (In collaboration with ICC till faculty sensitization is complete)

Evaluation – Feedback

FOR POSTGRADUATES

Session of 2-3 hrs preferably in induction program.

Aim – To introduce medically accurate concept of gender, sex, gender role & sex role.

To ensure healthy gender attitude at workplace.

To understand gender associated concepts on health related issues & avoid such bias while providing health care.

To make them aware about ICC & its functioning.

Mode – Interactive PPT

Role plays & discussion

Duration – 2 to 3 hrs

Evaluation – Feedback.

FOR FACULTIES

Session of 2 hours may be during combined activities.

Aim – To ensure clarity of concept about gender & sex.

To discuss effect of these concepts on health-related issues.

To identify such gender & sex-related issues in individual subject specialties.

To discuss methodology like PBL for undergraduate students when they are in 7th-8th semester.

Mode – Role play

 Focused group discussion

 Case studies

Evaluation – Feedback.



MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

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