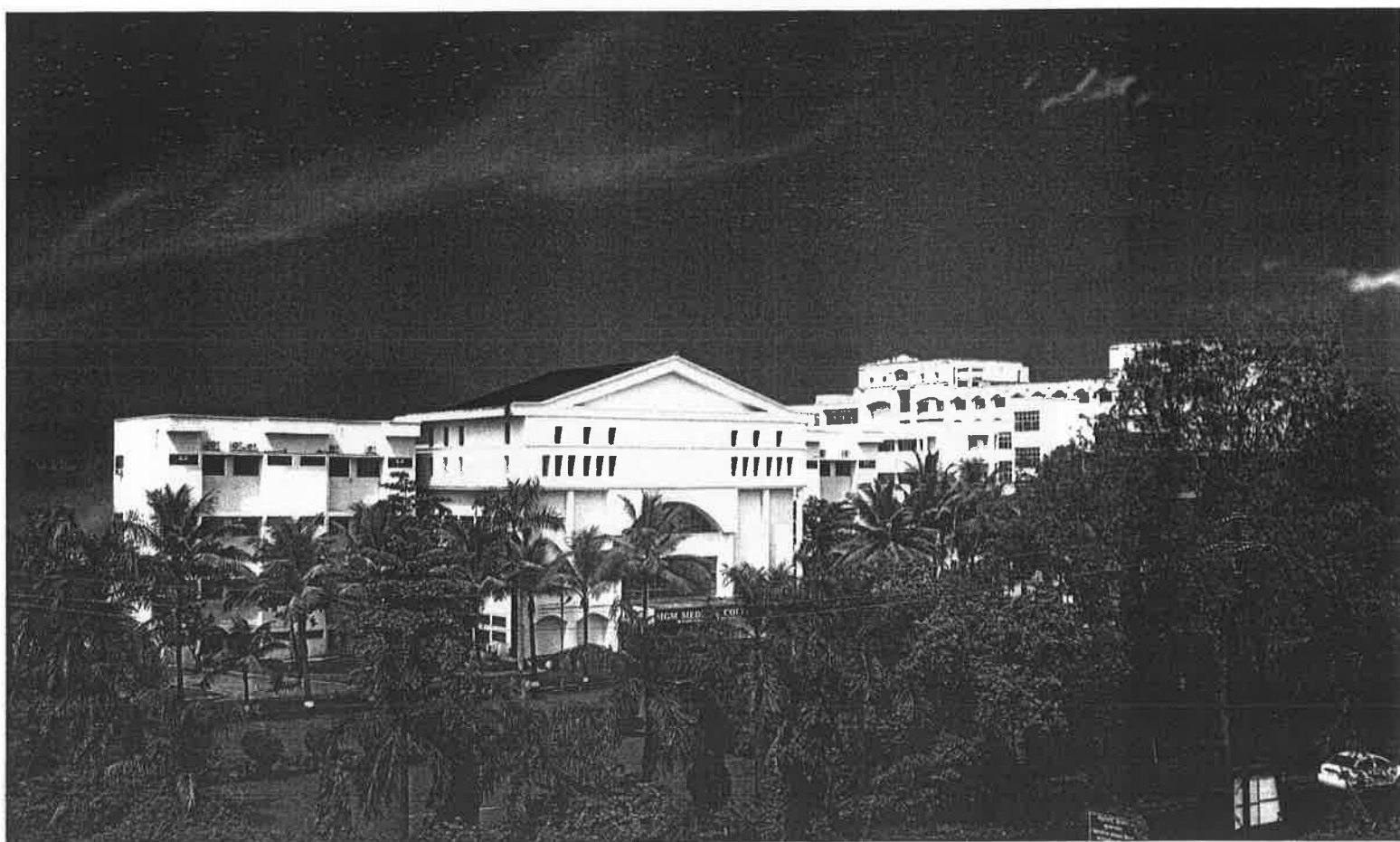


# **Curriculum for MD Degree in General Medicine**



**IN PURSUIT OF EXCELLENCE**



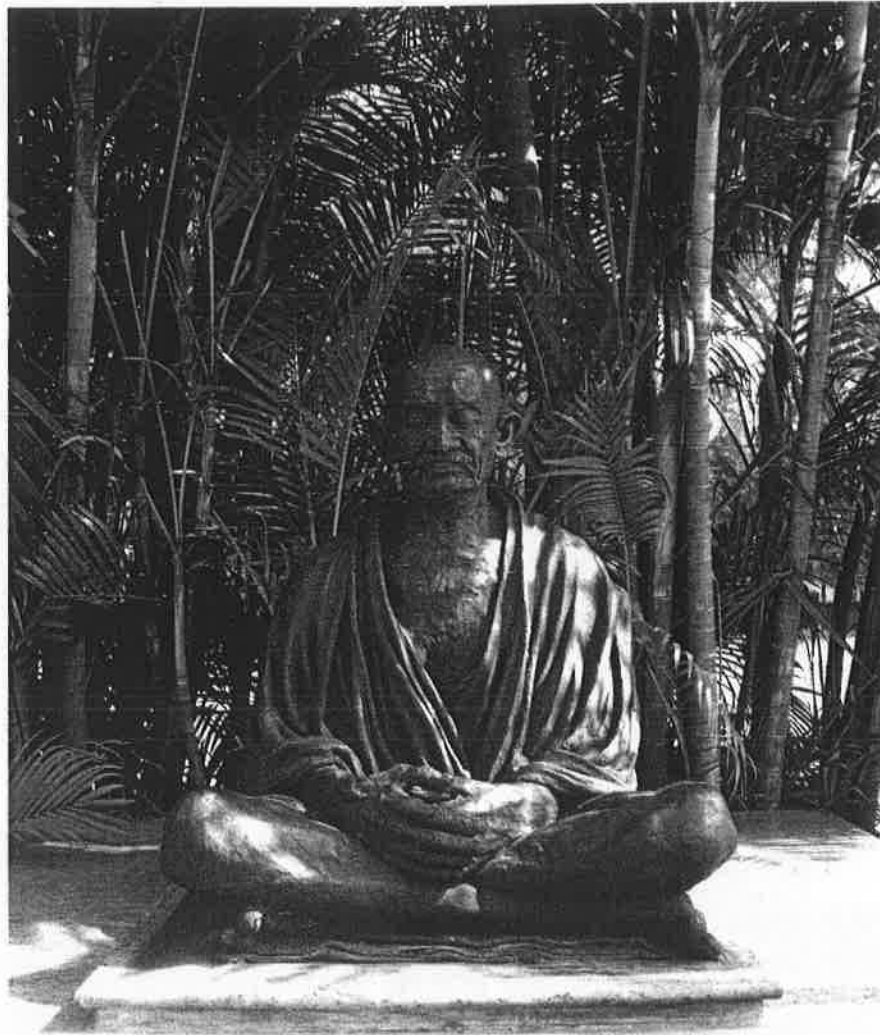
**MGM INSTITUTE OF HEALTH SCIENCES**

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

Navi Mumbai - 410 209

  
[www.mgmuhs.com](http://www.mgmuhs.com)

## INSPIRING MINDS



### Mission

To improve quality of the life for individuals and community by promoting health, preventing and curing disease, advancing biomedical and clinical research and educating tomorrow's Physicians and Scientists.

### Vision

By 2020 the MGM University of Health Sciences will rank one of the top private Medical Institution. This will be achieved through ground breaking **discoveries in basic sciences and clinical research** targeted to prevent and relieve human suffering, **excellence in Medical Education** of the next generation of academic clinicians and intrinsic scientists.

MGM University of Health Sciences will transform the **Education** of tomorrow's Physicians and Scientists conducting **Medical Research** to advance health and improving lives by providing world-class patient care.

Many see the 21<sup>st</sup> Century as the golden age of biomedical research. The MGM University of Health Sciences will position for leadership at the horizon of this new era to promote and stabilise stand human health with a standard of excellence.

## **MD (General Medicine)**

### **GOAL**

A postgraduate in a general medicine is expected to diagnose and treat common medical illnesses and have a sufficient knowledge of rare diseases, advances and technologies in medicine. He should be able to manage medical emergencies and carry out research and undergraduate medical teaching.

**OBJECTIVES:** To achieve the goal following objectives must be fulfilled:

#### **A) COGNITIVE DOMAIN:**

1. Proper history, examination and diagnosis.
2. Relevant investigations, their interpretation with reasonable accuracy.
3. Appropriate treatment and early disposal.
4. Prompt diagnosis and management of emergencies.
5. Update knowledge
6. Teach and guide undergraduate (MBBS) students.
7. Carry out research and publication.

#### **B) PSYCHOMOTOR DOMAIN:**

1. To perform diagnostic/ therapeutic procedures like central venous line insertion, lumbar puncture, pleural/ pericardial/ ascites tapping, bone marrow aspiration, liver/ kidney/ pleural biopsy, and interventions such as mechanical ventilation, tube thoracostomy, cardiopulmonary resuscitation, temporary pacing etc.
2. To be familiar with complication of procedures and be equipped in their management.

#### **B) AFFECTIVE DOMAIN:**

1. Ethical principles during work
2. Seek and give consultation when required.
3. Sympathetic behavior with patients and their relatives.
4. Respects patients' rights and privileges.
5. Supplement information about their illness.
6. Consider seeking second opinion when requested by patients.
7. Develop communication skills to interact with colleagues, senior and paramedical staff.
8. To realize that patient management is a team work.

## **COURSE DESCRIPTION**

Duration: 3 years Residency program

## **SCOPE OF TRAINING**

Diseases related to general medicine, relevant radiology techniques, emergency and intensive care management, maintaining records, use of computers and basic research. Patient care in the settings of outdoor, day care, indoor, emergency and intensive/ critical care.

## **COURSE CONTENTS**

- 1) Knowledge
  - a) Applied basic science knowledge
  - b) Diseases with reference to General Medicine (appendix -1)
  - c) Recent advances
  - d) Biostatistics and clinical epidemiology
- 2) Skills:-
  - a) Decision making
  - b) Diagnostic investigation and procedures
  - c) Monitoring seriously ill patients
  - d) Counseling patients and relatives
  - e) Ability to teach undergraduate students
  - f) Ability to carry out research

## **TEACHING & LEARNING ACTIVITIES**

- a) Ward/OPD patient management
- b) Long and short topic presentations
- c) Ward rounds, case presentations and discussions
- d) Clinico-radiological and clinico-pathological conferences
- e) Journal conferences
- f) PG Case presentation clinics
- f) Research review
- g) In-house and guest lectures
- h) Conferences, symposia, seminars and CMEs
- i) Participations in workshops, updates, conferences
- j) Teaching undergraduates
- k) Use and maintenance of biomedical equipments

## **STRUCTURED TRAINING PROGRAMME**

( Broadly conceived):

### **1) First Year Residency:**

- a) Outpatients/inpatients care
- b) Managing medical emergencies
- c) Learning diagnostic/ therapeutic procedures and interventions
- d) Interpreting Reports
- e) Starting Dissertation
- g) Use of computers in medicine

## **2) Second Year Residency:**

- a) Outpatients/inpatients care
- b) Rotation (six months to one year) in existing allied specialities such as Cardiology, Neurology, Endocrinology, Hematology, Nephrology and MICU.
- c) Conducting medical procedures independently.
- d) Continuation of dissertation work.

## **3) Third Year Residency:-**

- a) Out-patients and in-patients care
- b) Independent management of emergencies
- c) Teaching junior Residents / under-graduate students enrolled in the subject
- c) Finalisation and submission of dissertation.

## **DISSERTATION**

- The topic should be assigned to the student by the end of 6th month of enrollment.
- The topic should be communicated to the MGMUHS through Head of Department and Head of Institution by 7th month of enrollment.
- The duration of the study shall be upto 17 months.
- The last date of submission of the completed dissertation to the MGMUHS should be six months prior to the date of commencement of the degree examination.
- Permission from the Ethical committee after finalization of the topic

## **EVALUATIONS**

Regular evaluation of the postgraduate will be carried out by assessment of postgraduate activity like case presentation, seminars etc. (appendix-2) and evaluation at the end of each clinical posting including superspeciality postings. (appendix- 3). The overall performance has to be to the satisfaction of the HOD for recommendation of candidature for MD examinations.

## **RECOMMENDED READING**

### **Books.-**

- ☐ Harrison's Principles of Medicine
- ☐ Oxford Textbook of Medicine
- ☐ Cecil Textbook of Medicine

### **Reference Books:**

- ☐ API Text Book of Medicine
- ☐ Wintrobe's Hematology
- ☐ Kelly's Textbook of Rheumatology
- ☐ Patten's Neurology
- ☐ Brain's Neurology
- ☐ Crofton and Douglas Respiratory Medicine
- ☐ Hepatology by Sheila Sherlock
- ☐ Electrocardiography by Shamroth
- ☐ Braunwald's Cardiology

**Journals:**

- ☐ Lancet
- ☐ British Medical Journal
- ☐ Chest
- ☐ ICMR Bulletin
- ☐ WHO Bulletin
- ☐ New England Journal of medicine
- ☐ Journal of Association of Physicians of India
- ☐ Journal of Postgraduate Medicine
- ☐ Annals of Internal Medicine
- ☐ APICON Medicine Update
- ☐ Medical Clinics of North America
- ☐ Indian Practitioner
- ☐ Journal of Applied Medicine
- ☐ Journal of General Medicine

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## UNIVERSITY EXAMINATIONS

□ After successful completion 3 Years' residency

### Theory Examination:

Each paper 100 marks – 3 hrs duration

	Sections with marks	Syllabus to be included
<b>Paper I</b>	Two LAQ $2 \times 25 = 25$ Five out of six SAQ $5 \times 10 = 50$  Total 100	Basic Sciences in General Medicine, Genetics, Nutrition.
<b>Paper II</b>	Two LAQ $2 \times 25 = 25$ Five out of six SAQ $5 \times 10 = 50$  Total 100	Cardio-vascular system, Respiratory system Nephrology, Rheumatology, Immunology, Infectious diseases, Dermatology.
<b>Paper III</b>	Two LAQ $2 \times 25 = 25$ Five out of six SAQ $5 \times 10 = 50$  Total 100	Gastroenterology, Nervous system, Psychiatry, Hematology, Oncology, Endocrinology, Miscellaneous.
<b>Paper IV</b>	Two LAQ $2 \times 25 = 25$ Five out of six SAQ $5 \times 10 = 50$  Total 100	Recent Advances in General Medicine
	<b>TOTAL THEORY = 400</b>	

**Minimum passing marks: 50%.**

**Practical Examination:**

	Description	Marks	Preparation time	Assessment time
Long Cases	1 Neurologic case	100	45 min Each	20 min
Short Cases (Two)	Of systems other than the systems of long cases	50x2= 100	15 min Each	10 min
Viva (Four Tables)	Radiology ( X-Rays,CT,MRI,instrument)	25		5 min
	ECG / Lab Investigations, ABG analysis	25		5 min
	Therapeutics /Emergencies	25		5 min
	Thesis	25		5 min
Total marks		300		

**Minimum passing marks: 50%.**



## **Appendix -1**

### **Syllabus**

#### **Diseases in General Medicine**

### **HAEMATOLOGY**

#### **I. Red cell disorders**

Approach to a patient with anemia, nutritional, iron deficiency, aplastic, megaloblastic, haemolytic anemia, (special emphasis on thalassemia & sickle cell anemia), hereditary spherocytosis, anemia of chronic disease, autoimmune hemolytic anemia, paroxysmal nocturnal hemoglobinuria, myelodysplastic syndromes, iron overload, and sideroblastic anaemias.

#### **II. White cell disorders**

Eosinophilia, febrile neutropenia, approach to a patient with splenomegaly & lymphadenopathy, lymphomas, multiple myeloma & related plasma cell disorders, leukemias, hairy cell leukemia.

#### **III. Bleeding & coagulation disorders**

Approach and investigations in patients with bleeding disorders, hemophilia, von willebrand's disease, immune thrombocytopenic purpura, vascular purpuras, henchschonlein purpura, thrombotic thrombocytopenic purpura, disseminated intravascular coagulation, anticoagulant and anti-platelet therapy.

#### **IV. Miscellaneous**

Approach to a patient with thrombosis, blood groups, transfusion related diseases, blood transfusion reactions, blood component therapy, hematological manifestations of systemic diseases, drug induced hematological disorders, hypersplenism, chemotherapy, bone marrow transplantation, thrombophilias, platelet function disorders, estimation of hemoglobin/ total and differential white cell count/ erythrocyte sedimentation rate, preparation and staining of blood smears.

### **ENDOCRINE**

#### **I. Disorders of glucose metabolism**

Glucose metabolism, physiology of insulin & glucagon secretion, glucose tolerance test, diabetes mellitus, insulin preparations, hypoglycemia, glycosuria of causes other than diabetes mellitus, glucagon secreting tumors.

#### **II. Thyroid gland & its disorders**

Iodine metabolism, anatomy & physiology of thyroid gland, thyroid function tests, goiter, hypothyroidism and hyperthyroidism, myxedema, cretinism, thyroid carcinoma, other rare syndromes of thyroid dysfunction.

### III. Disorders of anterior pituitary

Anatomy & physiology of various hormones & their regulation, acromegaly, gigantism, Sheehan's syndrome.

### IV. Disorders of posterior pituitary

Anatomy and physiology, diabetes insipidus, syndrome of inappropriate anti-diuretic hormone (SIADH) secretion, obesity.

### V. Disorders of adrenal cortex

Regulation of secretion of glucocorticoids, mineralocorticoids & adrenal sex hormones, adrenal insufficiency, Cushing's syndrome, pheochromocytoma.

### VI. Miscellaneous

Dwarfism, Frohlich's syndrome, Lawrence Moon Biedel syndrome, anorexia nervosa & bulimia, hypothalamus in health & disease, Conn's disease, gynaecomastia, non-puerperal galactorrhoea, multiple endocrine neoplasia syndromes, hirsutism, adrenogenital syndromes, disorders of sexual differentiation.

## CARDIO-VASCULAR SYSTEM

ECG & its interpretation, diagnosis of arrhythmias & their management, ischaemic heart disease, hypertension, rheumatic fever & rheumatic heart disease, congenital heart diseases, heart failure, pericardial diseases, peripheral vascular diseases, deep vein thrombosis, cardiomyopathies, principles of echocardiography & abnormalities in common disorders, pacemakers, nuclear medicine in cardio-vascular disorders, tumors of the heart, aneurysm & dissection of the aorta, thoracic outlet syndrome, cardiac catheterisation, cardiac interventions.

## RESPIRATORY SYSTEM

Approach to a patient of respiratory system involvement, pulmonary function tests, arterial blood gases, bronchoscopy, imaging studies, pulmonary angiography, therapeutic interventions: pulmonary artery embolisation/ video assisted thoracic surgery/ thoracotomy/ mediastinoscopy, diseases of the upper airway including avian influenza, bronchial asthma, occupational lung diseases, pneumoconioses, organic dusts & environmental carcinogens, pneumonia, bronchiectasis, obstructive airways diseases, interstitial lung diseases, diseases of the pleura: effusion/ pneumothorax/ empyema/ haemothorax, air pollution, respiratory failure, adult respiratory distress syndrome, severe acute respiratory syndrome (SARS), mechanical ventilation, mediastinal diseases, infections including tuberculosis, tumors, primary and metastatic carcinomas, hypersensitivity pneumonitis, eosinophilic pneumonias, pulmonary hypertension, sleep apnea, pulmonary thromboembolism, lung transplant.

## NERVOUS SYSTEM

Investigations: lumbar puncture/ cerebrospinal fluid examination/ electroencephalography/ evoked potentials/ nerve conduction studies/ electromyography/ imaging studies/ angiography, migraine, seizures/ epilepsy, cerebrovascular diseases, sub-arachnoid haemorrhage, dementia, extra pyramidal disorders, Parkinson's disease, motor neurone disease, disorders of cranial nerves, meniers syndrome, benign positional vertigo, diseases of the spinal cord, cranio-vertebral anomalies, tumors of the nervous system, demyelinating diseases, meningitis, infections of nervous system, nutritional and metabolic disorders, central pontine myelinolysis, Wernicke's encephalopathy, alcoholic cerebral degeneration, pellagra, subacute combined degeneration, polyneuropathies, acute and chronic inflammatory demyelinating polyneuropathies, diabetic neuropathies, mononeuritis multiplex, mononeuropathy, leprosy, neuromuscular junction disorders including myasthenia gravis, myopathies (hereditary/ endocrine/ metabolic/ thyroid diseases/ parathyroid diseases/ diabetes mellitis), periodic paralysis, approach to a patient paralysis, dizziness & vertigo, diplopia, syncope and transient loss of consciousness, involuntary movements, delirium, ataxia, parasthesias & sensory loss, unconsciousness, bowel & bladder abnormalities, progressive supranuclear palsy, dystonia, spinocerebellar ataxia, drug induced movement disorders, inherited ataxia, traumatic injuries, subdural & epidural hematoma, radiation & chemotherapy in treatment of nervous system tumours, subdural empyema, progressive multifocal leucoencephalopathy, subacute sclerosing pan encephalitis, progressive rubella, panencephalitis, kuru, molecular treatment of neurological disorders, disorders of the autonomic nervous system, details of traumatic injuries to skull & spine, hereditary & metabolic disorders of late onset, mitochondrial myopathies, lipid storage disorders.

## INFECTIOUS DISEASES

Sepsis syndromes, pyrexia of unknown origin, infective endocarditis, acute infectious diarrhoeal diseases & food poisoning, infections of the urinary tract, infections of skin/ muscle/ soft tissues, infections in intravenous drug abusers, hospital acquired infections, infection control in hospital, bacterial infections, specific infections: pneumococcal/ staphylococcal/ tetanus/ streptococcal/ diphtheria/ botulism/ gas gangrene/ meningococcal/ gonococcal/ salmonella/ shigella/ vibrio cholera/ brucella/ plague/ syphilis/ mycobacteria/ leptospira/ mycoplasma/ pseudomonas/ helicobacter pylori, viruses: herpes/ varicella/ ebstein barr virus/ cytomegalo virus/ rabies/ respiratory viruses/ influenza/ measles/ mumps/ rubella/ arboviruses, fungal: candidiasis/ aspergillosis/ mucormycosis, parasites: ameobiasis/ giardiasis/ pneumocystis carinii/ malaria/ leishmaniasis/ cryptosporidium/ microsporidium/ isospora/ filariasis/ neurocysticercosis/ worm infestations, tropical diseases, pancreatitis, osteomyelitis, infections due to bites/ scratches/ burns, tularemia, pertussis, bartonellosis, arenaviruses, moraxella, legionella, nocardia, actinomycetes, borellia, chlamydiae, rickettsia, newer emerging infections: avian influenza, chikungunya, others.

**HIV/AIDS:** Aetiology & pathogenesis, clinical presentations, modes of transmission, universal precautions, opportunistic infections, management and treatment of the disease, opportunistic infections, complications, anti-retroviral therapy, prophylaxis: post exposure and of opportunistic infections, recent advances, historical record.

## **HEPATO-BILIARY SYSTEM**

Liver function tests, jaundice, hepatitis, cirrhosis of liver, portal hypertension, hepatic encephalopathy, hematemesis, amoebic hepatitis, granulomatous hepatitis, hydatid cyst, primary and metastatic carcinomas, liver transplant, gall bladder diseases: cholelithiasis/ cholecystitis/ diseases of bile-duct/ cholangiocarcinoma.

## **GASTROINTESTINAL TRACT**

Peptic ulcer disease, gastrointestinal bleeding, gastritis, endoscopy, radiological procedures, infections, inflammatory bowel disease, functional gut disorders, motility disorders, malabsorption syndromes, pancreatitis, cystic fibrosis, malignancy.

## **KIDNEY**

Renal failure, renal replacement therapies, hematuria, proteinuria, polyuria, oliguria, anuria, contrast nephropathy, urinary tract infections, glomerulonephritis, nephrotic syndromes, tubulo-interstitial diseases, kidney in systemic diseases, tumours of the urinary tract, renal calculous disease, barter's syndrome, fabry's disease, malignancy.

## **GERIATRIC MEDICINE**

Theories of ageing, demographic patterns (world / Asia / India) and their significance to health care system, physiological changes in the elderly, diseases in elderly, pharmacotherapy in the elderly, rehabilitation, physiotherapy, occupational therapy, psychotherapy, legal aspects (elderly abuse), psychiatric illnesses in elderly population, geriatric assessment, geriatric emergencies.

## **GRANULOMATOUS DISEASES**

Tuberculosis, leprosy, syphilis, sarcoidosis, Wegener's granulomatosis, histoplasmosis, coccidioidomycosis, mucocutaneous leishmaniasis, midline granuloma, lymphomatous granuloma, pseudotumor of the orbit.

## **ETHICAL & LEGAL ISSUES IN MEDICINE**

Importance and procedures of informed consent, emergency & life saving intervention & treatment, information to be given to patient & relatives, rights of patients including confidentiality, withdrawing life support systems, organ transplant from cadaver, euthanasia, consumers protection act, clinical decisions for a patient who lacks decision of signing of will, ethics committee & its role in medical research, procedures (medico

legal) followed in cases of poisoning, suspected rape, adverse reaction to drugs and interventions, absconded patients, in-hospital injuries and suicide, treatment of pregnant patients with drug and interventions likely to cause fetal harm, cloning, stem cells, usage and preservation, crimes performed by addicts.

## **POISONINGS**

Diagnosis and management of specific and unknown poisonings, universal & specific antidotes, acids and alkalis, kerosene, petroleum products, organophosphates and carbamates, household disinfectants, mosquito repellants, aluminium phosphide, zinc phosphide, yellow phosphorus, heavy metals, paracetamol, barbiturates, snake and scorpion bites, botulism, drug over-dosages, international classification of poisonous chemicals, environmental hazards and poisonings, industrial toxicology, toxidromes, nuclear, biological, chemical warfare.

## **PREGNANCY MEDICINE**

Maternal & foetal physiology, principles of maternal morbidity & fetal outcome, medical disorders during pregnancy, infections in pregnancy, metabolic disorders, hyponatremia, thyroid disorder, hypertension and eclampsia, renal failure, disseminated intravascular coagulation, diabetes, valvular heart disease, bronchial asthma, cardiomyopathies, jaundice, HIV/AIDS, hypercoagulable state and its sequelae and complications, cortical venous sinus thrombosis in pregnancy, post partum sepsis, amniotic fluid embolisation, Epilepsy, drugs in pregnancy, poisonings in pregnancy, smoking, alcoholism, surgery and pregnancy, psychiatric diseases in pregnancy, medical disorders and infertility, genetic disorders & genetic counseling, ethical issues in pregnancy (brain death).

## **RADIOLOGY**

Roengenograms of chest/ abdomen/ spine/ skull/ paranasal sinuses/ bones and joints, computerized tomography (CT) and magnetic resonance (MR) imagings, angiography, digital subtraction angiography, imaging techniques for hepatobiliary system, barium studies, intravenous urography, scintigraphy, radionuclide imaging of kidney/ bone/ heart/ liver/ lung/ gall bladder/ thyroid/ parathyroid/ whole body, echocardiography, ventriculography, positron emission tomography (PET) scan, lymphangiography, cardiac catheterization, ultrasound, color doppler, developing and newer imaging techniques.

## **DISORDERS BONE & MINERAL METABOLISM**

Calcium and phosphorous homeostasis, parathyroid gland disorders, vitamin-D in health & disease, metabolic bone disease, osteoporosis, osteomalacia, endocrine hormonal influences on bone metabolism, phosphorus metabolism, hypophosphatemia, hyperphosphatemia, disorders of magnesium metabolism, Paget's disease of bone, osteomyelitis, bone dysplasias, osteoarthritis, spondylosis, bone in systemic diseases.

## **IMMUNOLOGY**

Normal immune system and its functions, hypersensitivity reactions, T-cell mediated diseases, mechanism of tissue damage, cytokine mediated injury, cytokine inhibitors, interaction of T and B cells, complement system, apoptosis, immunotherapy, immunomodulators, immunosuppressive agents, monoclonal antibodies, stem cell transplant in immune disorders, HLA system, primary immune deficiency diseases, amyloidosis, disorders of immediate type hypersensitivity, biological response modifiers, immunologically mediated skin disorders.

## **RHEUMATOLOGY**

Pathophysiology of inflammation, autoantibody relevance in disease processes, rheumatoid arthritis including extra-articular manifestations, glucocorticoid therapy in connective tissue diseases, systemic lupus erythematosus (SLE), organ targeted therapy, vasculitides, ankylosing spondylitis, reactive arthritis, undifferentiated spondyloarthropathy, polyarteritis nodosa, Wegener's granulomatosis, Churg Strauss disease, Takayasu's arteritis, cutaneous vasculitis, imaging techniques in systemic vasculitis, approach to acute and chronic monoarthritis & polyarthritis, diagnostic imaging in joint disease, crystal arthropathies, gout, infectious arthritis, infections in patients with connective tissue diseases, anti-phospholipid antibody syndrome (APLA), drug induced rheumatic diseases, scleroderma, sarcoidosis, fibromyalgias, haemophilic arthropathy, dermatomyositis, polymyositis, overlap syndromes, Sjögren's syndrome, calcium oxalate deposition disease, psoriatic arthritis, neuropathic joint disease, osteoarthritis.

## **FLUID & ELECTROLYTE**

Choice of intravenous fluids, plasma expanders, potassium/ calcium/ sodium/ magnesium/ phosphate disorders, acid base balance and disorders.

## **CRITICAL CARE**

Cardio-pulmonary resuscitation, non-invasive and invasive cardiovascular monitoring, circulatory failure, heart failure, acute myocardial infarction, pulmonary embolism, respiratory failure, pulmonary aspiration, nosocomial pneumonia, mechanical ventilation, toxicology, renal failure, status epilepticus, Guillain Barre syndrome, myaesthesia, use of blood products, intravenous immunoglobulins, plasmapheresis, hyperthermia, hypothermia, diabetic ketoacidosis, Addisonian crisis, myxedema coma, endotracheal intubation, pacemakers, strokes, subarachnoid haemorrhage, near-drowning, circulatory and ventilatory support in adult respiratory distress syndrome (ARDS), asthma, obstructive airways disease, renal replacement therapy.

## EMERGENCY MEDICINE

Basic and advanced life support, disaster management, use and maintenance of equipment used in life support, acute severe asthma, status epilepticus, poisonings, heart failure, shock, acute myocardial infarction, angina, arrhythmias, hypertensive emergencies, medical emergencies in pregnancy, gastro-intestinal bleeding, hepatic encephalopathy, acute gastroenteritis, hemoptyses, obstructive airways disease, tension pneumothorax, adult respiratory distress syndrome (ARDS), respiratory failure, cor pulmonale, stroke, sub-arachnoid haemorrhage, oliguria/ anuria, coma, pneumonia, meningitis, infections, sepsis syndromes, multi-organ failure, bleeding manifestations, endocrine emergencies, electric shock, poisonings, snakebite, scorpion stings, anaphylaxis, nuclear/ biological/ chemical exposures, toxidromes, rabies, burns, strangulation, interventions and procedures: mechanical ventilation/ temporary cardiac pacing/ invasive monitoring/ needle and tube thoracostomy/ cricothyrotomy.



## **Appendix -2**

### **PG - ACTIVITY ASSESSMENT SHEET**

Student's Name..... Date.....

#### **PG – CLINIC (Case presentation)**

- a. History & Examination
- b. Investigations
- c. Diagnosis & Clinical co-relation
- d. Management
- e. Questions & Answers

#### **CLINICAL SEMINAR (Case discussion)**

- a. Case details
- b. Discussion (content, update references, etc)
- c. Presentation (Clarity, time, language, etc)
- d. Audio-visual aides
- e. Questions & Answers

#### **SEMINAR (Problem/ syndrome based discussion)**

- a. Content
- b. Update with references
- c. Presentation (Clarity, time, language. etc)
- d. Audio-visual aides
- e. Questions & Answers



## Appendix 3

### CLINICAL WORK EVALUATION SHEET

For posting under one Unit (including super-specialty postings)

Student's Name ..... Posting period. .... to .....

Points for Assessment:

1. Punctuality and discipline
2. Quality of Ward-work
3. Maintenance of Case-Records
4. Presentation of cases in Rounds
5. Investigation Work-up
6. Bedside manners
7. Rapport with the patients
8. Rapport with Colleagues
9. Undergraduate Teaching (if applicable)
10. Counseling patient's relatives

Name of the Unit head Signature  
Dated

**MGM INSTITUTE OF HEALTH SCIENCES, NAVI MUMBAI**

### MARKLIST FOR PRACTICAL AND VIVA-VOCE EXAMINATION

**EXAM CENTRE:** \_\_\_\_\_ **COURSE / EXAM :** PG –

DATE OF EXAMINATION: \_\_\_\_\_ EXAMINATION FOR: M.D. (GENERAL MEDICINE)

[illegible]

<b><u>NAME OF EXAMINER</u></b>	<b><u>COLLEGE</u></b>	<b><u>SIGNATURE WITH DATE</u></b>
<b><u>1.</u></b>		
<b><u>2.</u></b>		
<b><u>3.</u></b>		
<b><u>4.</u></b>		

**PAPER WISE DISTRIBUTION OF TOPIC IS AS GIVEN BELOW.**

**1.1. PG COURSES: - M.D.**

SN	COURSE TITLE	SUBJECT NAME	PAPER NO. & TOPICS
i)	M.D.	GENERAL MEDICINE	I. Basic Sciences in <b>General Medicine</b> , Genetics, and Nutrition. II. Cardio-Vascular system, Respiratory System Nephrology, Rheumatology, Immunology, <b>Infectious diseases</b> , Dermatology. III. Gastroenterology, <b>Nervous system</b> , Psychiatry, Hematology, Oncology, Endocrinology, Miscellaneous. IV. Recent Advances in <b>General Medicine</b> .
ii)	M.D.	PATHOLOGY	I. General Pathology including General Neoplasia, Immunopathology and cytopathology. II. Systemic Pathology including Systemic Neoplasia. III. Haematology, Transfusion medicine, Immunohaematology including Recent Advances. IV. Clinical Pathology, Chemical Pathology, Pathology of infectious diseases, Recent Advances.
iii)	M.D.	MICROBIOLOGY	I. General Microbiology & Immunology II. Systemic Bacteriology, III. Mycology & Virology IV. Parasitology & Recent Advances
iv)	M.D.	PHARMACOLOGY	I. Screening and evaluation of drugs (Animal and Clinical), Clinical Pharmacology, General Pharmacology, Biostatistics. II. Systemic Pharmacology III. Applied Pharmacology including Therapeutics, Miscellaneous topics (GIT, RS. Autocolds, vitamins, skin, ocular Pharmacology, Immunopharmacology, chelating agents, Drugs and Pregnancy) IV. Recent Advances in Pharmacology

## IN PURSUIT OF EXCELLENCE

### MGM DEEMED UNIVERSITY OF HEALTH SCIENCES

#### Constituent Colleges

##### Navi Mumbai

M.G.M. Medical College  
M.G.M School of Biomedical Science  
M.G.M School of Physiotherapy  
M.G.M New Bombay College of Nursing  
M.G.M College of Nursing

##### Aurangabad

M.G.M. Medical College  
M.G.M School of Biomedical Science  
M.G.M School of Physiotherapy  
M.G.M College of Nursing



**MAHATMA GANDHI MISSION**

### AURANGABAD

- MGM's Jawaharlal Nehru Engineering College
- MGM's Institute of Management
- MGM's Mother Teresa College of Nursing
- MGM's Mother Teresa Institute of Nursing Education
- MGM's College of Journalism & Media Science
- MGM's Medical Center & Research Institute
- MGM's College of Fine Arts
- MGM's Dr. D. Y. Pathrikar College of Comp. Sc. & Tech.
- MGM's Hospital & Research Center
- MGM's College of Agricultural Bio-Technology
- MGM's Dept. of Bio-Technology & Bio-informatics.
- MGM's Inst. of Hotel Management & Catering Tech.
- MGM's Institute of Indian & foreign Languages & Comm.
- MGM's College of Physiotherapy
- MGM's Hospital, Ajabnagar
- MGM's Sangeet Academy (Mahagami)
- MGM's Institute Naturopathy & Yoga
- MGM's Sports Club & Stadium
- MGM's Institute of Vocational Courses
- MGM's Horticulture
- MGM's Health Care Management
- MGM's Junior College of Education (Eng. & Mar.)
- MGM's Sanskar Vidyalaya (Pri. & Sec. - Mar.)
- MGM's Clover Dale School (Pri. & Sec. - Eng.)
- MGM's First Steps School (Pre-Primary - English)
- MGM's Sanskar Vidyalaya (Pre-Primary - Marathi)
- MGM's School of Biomedical Sciences

### NAVI MUMBAI

- MGM's College of Engineering & Technology
- MGM's Institute of Management Studies & Research
- MGM's Dental College & Hospital
- MGM's College of Physiotherapy
- MGM's College of Media Science
- MGM's Institute of Research
- MGM's New Bombay Hospital, Vashi
- MGM's Hospital, CBD
- MGM's Hospital, Kamothe
- MGM's Hospital, Kalamboli
- MGM's Infotech & Research Centre
- MGM's Pre-Primary School (English & Marathi)
- MGM's Primary & Secondary School (Eng. & Mar.)
- MGM's Junior College Science
- MGM's Junior College of Vocational Courses
- MGM's Florence Nightingale Inst. Nursing Edu.
- MGM's College of Nursing
- MGM's College of Law

### NANDED

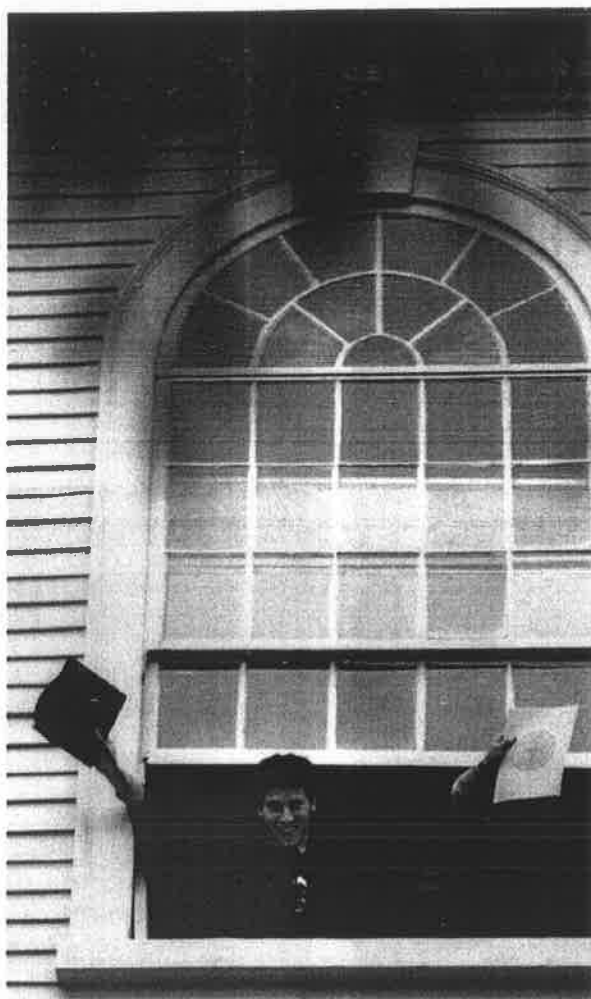
- MGM's College of Engineering
- MGM's College of Fine Arts
- MGM's College of Computer Science
- MGM's College of Journalism & Media Science
- MGM's Centre for Astronomy & Space Tech.
- MGM's College of Library & Information Science

### PARBHANI

- MGM's College of Computer Science

### NOIDA (U.P.)

- MGM's College of Engineering & Technology



**MGM University of Health Sciences**  
(Education - Health Services - Research)  
A Mission started, nurtured and Managed  
by Professional Doctors, Scientists Engineers...



**MGM INSTITUTE OF HEALTH SCIENCES**

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



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

**Resolution No. 5.25:** Resolved to institute 6 monthly progress Report for PG Students of all Courses from the batches admitted in 2016-17. **[Annexure-XVII of BOM-48/2017]**

**Mahatma Gandhi Mission's Medical College and Hospital  
Navi Mumbai**

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**Six monthly Progress Report for Postgraduate Students**

**PART A**

Name of the PG student: \_\_\_\_\_

Department: \_\_\_\_\_

Admitted in (Month and Year): \_\_\_\_\_

Name of the PG guide: \_\_\_\_\_

Report for the period: \_\_\_\_\_ to \_\_\_\_\_

Attendance: \_\_\_\_\_ days ( \_\_\_\_\_ %)

**PART B**

**Grading as per performance**

Grade	Percentage
A	80% and above
B	65% to 79%
C	50% to 64%
D	Below 50%

1. OPD work:
2. Ward work:
3. Lab work:
4. OT work:
5. ICU work:
6. Teaching assignments:

### PART C

#### Progress of Thesis


### PART D

*Activities from serial No. 1 to 5 should be rated on a scale of 0 to 10.*

#### 1. Case Presentations

Sr. No.	Topic	Date	Guide	Marks

#### 2. Microteaching

Sr. No.	Topic	Date	Guide	Marks

#### 3. Recent Advances

Sr. No.	Topic	Date	Guide	Marks



#### 4. Seminars

Sr. No.	Topic	Date	Guide	Marks

#### 5. Journal Clubs

Sr. No.	Journal	Title of Paper	Date	Guide	Marks

#### 6. Marks obtained in tests

Sr. No.	Date	Theory / Practical	Marks obtained

#### 7. Any other academic activity conducted:

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## PART E

### 1. Papers presented

Sr. No.	Title of Paper	Authors	Event	Date

### 2. Posters presented

Sr. No.	Title of Poster	Authors	Event	Date

### 3. Publications

*(Note: Mention only those publications that are published or are accepted for publication during the said period only)*

Sr. No.	Title of Paper	Authors	Journal	Year/Vol/ Issue	Page Nos	Indexed/ Non-Indexed	Status

**Certificate by the PG Guide**

This is to certify that Dr. \_\_\_\_\_ has an attendance of \_\_\_\_\_% , during the period \_\_\_\_\_ to \_\_\_\_\_. His /Her performance during the said period has been **satisfactory/ average / unsatisfactory**.

Overall Grading: \_\_\_\_\_

Date: \_\_\_\_\_

Name and Signature of PG guide:

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**Certificate by the Head of Department**

This is to certify that the performance of Dr. \_\_\_\_\_ during the period \_\_\_\_\_ to \_\_\_\_\_, has been **satisfactory/ average / unsatisfactory**.

Overall Grading: \_\_\_\_\_

Date: \_\_\_\_\_

Name and Signature of HOD:

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**Final Remarks**

**Satisfactory / Average / Unsatisfactory**

Director (Academics)

Dean

Date:

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**Resolution No. 1.3.7.11 (i) of BOM-51/2017:** Resolved that the following Bioethics topics in PG Curriculum are to be included for PG students of all specialization and a sensitization of these topics can be done during PG Induction programme:

- Concept of Autonomy
- Informed Consent
- Confidentiality
- Communication Skills
- Patient rights
- Withholding / Withdrawing life-saving treatment
- Palliative Care
- Issues related to Organ Transplantation
- Surgical Research and Surgical Innovation
- Hospital Ethics Committee
- Doctor-Patient relationship

PG.

30/09/17

Resolution No. 1.3.23 of BOM-51/2017: Resolved to implement a Structured Induction programme (07 days) for PG students. [Annexure XI-IV]

MGM INSTITUTE OF HEALTH SCIENCES  
Navi Mumbai

**Induction Program for newly admitted Postgraduate students**

Day 1	<ul style="list-style-type: none"><li>• Address by Dean, Medical Suptd, Director (Academics)</li><li>• Pre-test</li><li>• Communication Skills</li><li>• Universal Safety Precautions</li><li>• Biomedical Waste Management</li><li>• Infection Control Policy</li></ul>
Day 2 ✓	<ul style="list-style-type: none"><li>• Emergency services</li><li>• Laboratory services</li><li>• Blood Bank services</li><li>• Medicolegal issues</li><li>• Prescription writing</li><li>• Adverse Drug Reaction</li><li>• Handling surgical specimens</li></ul>
Day 3	<ul style="list-style-type: none"><li>• Principles of Ethics</li><li>• Professionalism</li><li>• Research Ethics</li><li>• Informed Consent</li><li>• Confidentiality</li><li>• Doctor-Patient relationship</li></ul>
Day 4	<ul style="list-style-type: none"><li>• Research Methodology</li><li>• Synopsis writing</li><li>• Dissertation writing</li><li>• Statistics</li></ul>
Day 5	
Day 6	
Day 7	<ul style="list-style-type: none"><li>• ATLS</li><li>• Post-test</li></ul>

The Induction Program will be conducted in the first week of June.  
Timing: 9.30 am to 3.30 pm

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

m) - General medicine

**Resolution No. 1.3.9.12 of BOM-51/2017:** Resolved to introduce portfolio cases in the PG internal exams (General Medicine) for the batch admitted in academic year 2017-18 onwards.

**Annexure XI**

medicine

Annexure - XI

(ANNEXURE E)

AGENDA FOR BOS 15/03/17 ( DR GHANEKAR MGM MUMBAI)

(ITEM 8- A TO F)

1. U.G. Teaching - Syllabus-

Addition of BLS in curriculum at IVth & VI th semester during Clinical posting. Students will be send once a week in a group of 10 by rotation from each department where they are posted. Rotation will be as per roll number.

2. Clinical posting changes – Annexure 1 & 2

3. Exam –

MBBS

- Syllabus for question paper to be sent to paper setters should mention must know, desirable to know & nice to know portions. 75 % questions should be from must know area. ( Annexure 3 )

- Moderation – In case of discrepancy of question in above mentioned issue, does moderator has right to change question in section B & C?

4. PG – Curriculum

Introduction of Portfolio of cases

5 cases

2 - Major non communicable , Life style diseases like HTN, DM



1 – Chronic D - CKD

1 – Acute case / Critical care

1- Difficult case which he/ she came across in three years of residency.

This should be started in 4<sup>th</sup> term . Submitted before prelim . To be evaluated by PG guide& HOD

Presentation of one case during University exam in PPT form

Benefit -

- At present exam pattern is of one long case (Neurology) and two short cases (system other than neurology) these are seen and presented on day of exam
- This portfolio case is his / her own case which PG has followed.

5. Research : Research methodology workshop in 1<sup>st</sup> year PG

6. PG Exam :

Theory -

In place of present pattern of two long answer questions of 25 marks each & five short notes of 10 marks each, Ten questions of 10 marks each may be considered. This will help in terms of wider coverage of syllabus of paper. Scoring would also improve. However passing criteria would remain same.

Practical –

One Long case (Neurology) - 100

One Portfolio case – 100

Two Short cases, other than neurology (2)- 50 marks each

Total = 300 marks

Table viva – same as before

MD General medicine

**Resolution No. 3.7.4 of BOM-52/2018: Resolved:**

- (i) To approve the paperwise theory topics [Annexure-VIII] for MD Medicine theory examination.
- (ii) To have 4 papers [Annexure-VIII] in university examination wherein Paper I, II, III would be on broad speciality & there would be 10 short notes out of 11 (10 marks each) while paper IV will continue as per existing pattern.
- (iii) This pattern is to be implemented from batch appearing in April/May 2019 examination onwards.

(Proposed Pattern with new guidelines, entailed with regulations 2000)

P.G. COURSE,

(M.D.)

SUBJECT – GENERAL MEDICINE

**Theory Examination:****Each paper 100 mark – 3 hrs duration**

Paper	Section with marks	Subjects
I	Two LAQ : $2 \times 25 = 50$ Five out of six SAQs : $5 \times 10 = 50$ Total = 100	Basic Sciences in General Medicine, Genetics & Molecular diseases, Nutrition, Immunology & Allergy.
II	Two LAQ : $2 \times 25 = 50$ Five out of six SAQs : $5 \times 10 = 50$ Total = 100	Cardio – Vascular system, Gastroenterology & Hepatology, Rheumatology, Dermatology, Nephrology, Haematology, Oncology.
III*	Two LAQ : $2 \times 25 = 50$ Five out of six SAQs : $5 \times 10 = 50$ Total = 100	Tropical medicine and infectious diseases, Nervous system, Psychiatry, Endocrinology, Metabolic diseases, Respiratory system & Environmental disorders.
IV	Two LAQ : $2 \times 25 = 50$ Five out of six SAQs : $5 \times 10 = 50$ Total = 100	Recent Advances in General Medicine
	Total Theory = 400	

Paper III\* -There should be 1 LAQ or 2 SAQ on Infectious disease/Tropical medicine. This is in order to provide due importance as let down in new guidelines for Infectious diseases/Tropical medicine.

Candidate should secure minimum 40% in each paper & 50% of total marks in theory for passing.



**Resolution No. 4.3.8 of BOM-53/2018:** Resolved to accept the Pattern of practical exam to be implemented for batch appearing in April/May 2019 for M.D (General medicine) university examination

<b>Long case</b>	<b>Communication skill station</b>	<b>Short case 1</b>	<b>Short case 2</b>	<b>Short case 3</b>	<b>Total marks</b>	<b>Table Viva 1</b>	<b>Table Viva 2</b>	<b>Table Viva 3</b>	<b>Table Viva 4</b>	<b>Total marks</b>	<b>Grand Total</b>
<b>100</b>	<b>20</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b><u>300</u></b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b><u>100</u></b>	<b><u>400</u></b>

**Resolution No. 4.3.8 of BOM – 53/2018 is amended as follows:**

In the revised pattern of practical exam of MD General Medicine, table Viva 1 (25 Marks) and table viva 2 (25 Marks) needs to be clubbed together and made into a single table viva '1' of 50 marks. Similarly table Viva 3 (25 Marks) and table viva 4 (25 Marks) needs to be clubbed together and made into a single table viva '2' of 50 marks. This is to be effective from April/May 2019 examination onwards.

**Resolution No. 4.5.4.2 of BOM-55/2018:** Resolved to have 10 short notes out of 11 (10 marks each) in all the papers in university examination for PG courses including superspeciality. To be implemented from batch appearing in April/May 2019 examination onwards for MD/MS/Diploma and August/September 2019 examination onwards for superspeciality.