



MGM INSTITUTE OF HEALTH SCIENCES

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

Grade 'A' Accredited by NAAC

Sector-01, Kamothe, Navi Mumbai -410 209

Tel 022-27432471, 022-27432994, Fax 022 -27431094

E-mail: registrar@mgmuhs.com; Website : www.mgmuhs.com

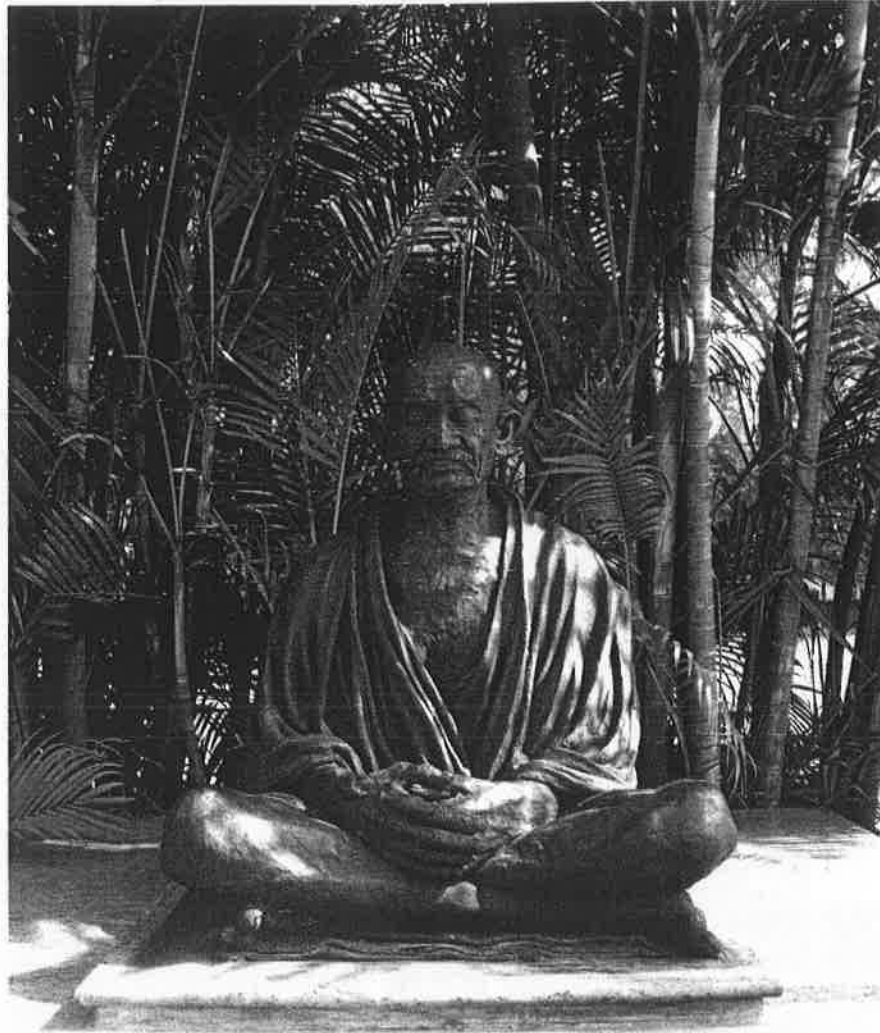
Curriculum for Doctor of Medicine General Medicine

Amended upto AC-41/2021, Dated 27/08/2021

Amended History

1. Approved as per BOM– 04/2007, Item 12.1, Dated 14/12/2007.
2. Amended as per BOM- 48/2017, [Resolution No. 5.25]; Dated 24/01/2017.
3. Amended as per BOM-51/2017, [Resolution No. 1.3.7.11], [Resolution No. 1.3.23], [Resolution No. 1.3.9.12]; Dated 28/08/2017
4. Amended as per BOM-52/2018, [Resolution No.3.7.4], Dated 13/01/2018.
5. Amended as per BOM-53/2018, [Resolution No. 4.3.5], [Resolution No. 4.3.8]; Dated 19/05/2018.
6. Amended as per BOM-55/2018, [Resolution No. 4.13], [Resolution No. 4.5.4.2], Dated 27/11/2018
7. Amended as per BOM-57/2019, [Resolution No. 3.1.3.1], [Resolution No. 3.1.3.9], [Resolution No. 3.1.4.2], Dated 26/04/2019.
8. Amended as per AC-41/2021, [Resolution No. 4.29], Dated 27/08/2021

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 21st 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
Paper I	Two LAQ $2 \times 25 = 25$ Five out of six SAQ $5 \times 10 = 50$ Total 100	Basic Sciences in General Medicine, Genetics, Nutrition.
Paper II	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.
Paper III	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.
Paper IV	Two LAQ $2 \times 25 = 25$ Five out of six SAQ $5 \times 10 = 50$ Total 100	Recent Advances in General Medicine
	TOTAL THEORY = 400	

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, Sjogren'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)

Seat No,	1			Total	2					Total	Grand Total Practical Total =400 Marks (1+2)
	Long Cases	2 Short Cases			Viva						
		Case 1	Case 2		Table 1	Table 2	Table 3	Table 4	Dissertation Viva		
	150	75	75	300	22.5	22.5	22.5	22.5	10	100	

NAME OF EXAMINER	COLLEGE	SIGNATURE WITH DATE
1.		
2.		
3.		
4.		

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 General Medicine , Genetics, and Nutrition. II. Cardio-Vascular system, Respiratory System Nephrology, Rheumatology, Immunology, Infectious diseases , Dermatology. III. Gastroenterology, Nervous system , Psychiatry, Hematology, Oncology, Endocrinology, Miscellaneous. IV. Recent Advances in General Medicine .
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

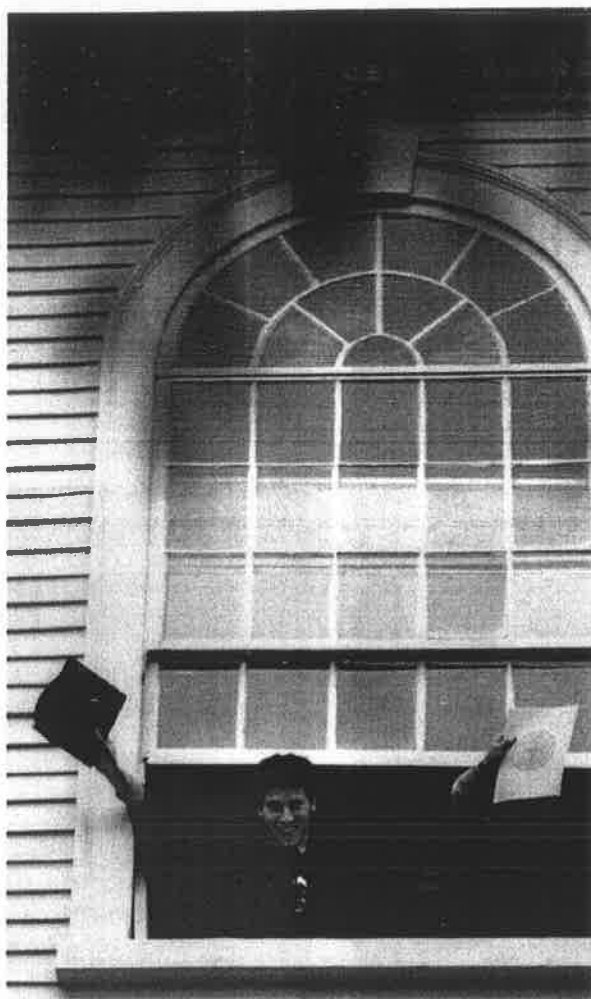
- MGM's College of Engineering
- MGM's College of Fine Arts
- MGM's College of Computer Science
- MGM's College of Journalism & Media Science
- MGM's Centre for Astronomy & Space Tech.
- MGM's College of Library & Information Science

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)



Post Box -6, MGM Educational Complex, Sector-18,
Kamothe, Navi Mumbai - 410209

Ph : - 022-27422471, 65168127, 65138121 Fax : 022-27420320

E-mail : mgmuniversity@mgmuhs.com

Website: www.mgmuhs.com

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**

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:

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:

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:

Final Remarks

Satisfactory / Average / Unsatisfactory

Director (Academics)

Dean

Date:

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

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 4th 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 1st 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

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

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.

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. 4.13 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. 3.1.3.1 of BOM-57/2019: It was resolved to approve the following list of books (new titles & reference books):

Subject	UG	PG	Annexure
General Medicine		√	Annexure-12
Respiratory Medicine		√	Annexure-13
Community Medicine	√		Annexure-14
Emergency Medicine		√	Annexure-15

Annexure - 12

List of books ,
Dept of General Medicine
For PG course

1 Medicine Update- 3 copies
2 Sapira's Art & Science of Bedside Diagnosis, fifth edition- 2 copies

Resolution No. 3.1.3.9 of BOM-57/2019: Resolved to approve change in marks distribution for MD Medicine university practical examination, to be implemented from batch appearing in University examination in April 2020.

Long case	Short case 1	Short case 2	OSCE		Total	Table Viva 1	Table Viva 2	Grand Total
			Case 3*	Communication skill				
150	50	50	30	20	300	50	50	400

*One of the short case in OSCE will be directly observed case.

Resolution No. 4.29 of AC-41/2021: Resolved to keep cases of major systems with equal marks for all three cases in PG practical examination in subject of Medicine, to be implemented from batch appearing in university exam in 2023 onwards [ANNEXURE-48].

Annexure-48 of AC-41-2021

Revised pattern of PG practical examination(as per Faculty Medicine decision)

Sub – General Medicine

Cases of major systems- 3 cases of 100 marks each = 300 marks

Stations for clinical, procedural & communication skills- 3 stations = 50 marks

Oral viva-50 marks

Case 1	Case 2	Case 3	Station 1 Procedural Skill	Station 2 Clinical Skills	Station 3 Communication Skills	Total Of clinical & Practical skills	Oral Viva 1 Interpretation of Investigations (Radiology, ECG, Lab reports	Oral Viva 2 Grand viva	Grand Total
100	100	100	20	20	10	350	25	25	400

Stations 1,2,3 will be OSCE with check list

Time for preparation of cases- Case 1 Case 2 & 3- 45 minutes each = Total- 135 min

OSCE stations- 10 minutes for each station= Total- 30 min

Oral viva- 10 minutes each= Total -20 min

Total 185 minutes for one candidate

Time for case viva-

Case 1- All four examiners together- 15 minutes

Case 2 & 3- Two examiners for one case- 10 minutes for each case

OSCE stations-

Station 1, Station 2 & 3- - Two examiners on each station- 30 minutes

Oral viva- Two examiners on each viva

Time required for one candidate viva- 85 minutes- 2 & half hours

Number of appearing candidates- 14

Number of days to conduct exam- 2

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 & agewise 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.

--3--

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 concept on health related issues.

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

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

Mode – Role play

Focused group discussion

Case studies

Evaluation – Feed back.



MGM INSTITUTE OF HEALTH SCIENCES

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

Grade 'A' Accredited by NAAC

Sector-01, Kamothe, Navi Mumbai - 410209

Tel 022-27432471, 022-27432994, Fax 022-27431094

E-mail- registrar@mgmuhs.com Website : www.mgmuhs.com

