Maharashtra University of Health Sciences

General Medicine

Second MBBS (Clinical posting)

(Based on Medical Council of India, Competency based Undergraduate curriculum for the Indian Medical Graduate, 2018. Vol. 2)

1. Total Teaching hours : **25+ 60**
2. A. Lectures(hours): **25** B. Self-directed learning (hours) : **NIL**
   C. Clinical Postings (hours): **60**
   D. Small group teachings/tutorials/Integrated teaching/Practicals (hours)**: NIL**

Week / Day	Day of the Week *	Competency Nos.	Topics & Subtopics (Suggested)	Duration	TL Method
1/ 1	Monday	1.10	Orientation to History Taking	3 hours	Bed side clinic
1/2	Tuesday	9.3	History taking and causes of anemia	1 hour	Bed side clinic
		8.9	Evaluation of all risk factors and co-morbidities for patient with hypertension	1 hour	Bed side clinic
		11.7	Elicit document and present a medical history that will differentiate the etiologies of diabetes including risk factors, precipitating factors, lifestyle, nutritional history, family history, medication history, co-morbidities and target organ disease	1 hour	Bed side clinic
1/3	Wednesday	16.4	Elicit and document and present an appropriate history that includes the natural history, dietary history, travel , sexual history and other concomitant illnesses	1 hour	Bed side clinic
		25.4	Elicit document and present a medical history that helps delineate the aetiology of zoonotic diseases that includes the evolution and pattern of symptoms, risk factors, exposure through occupation and travel	2 hours	Bed side clinic
1/4	Thursday	26.20	Demonstrate ability to communicate to patients in a patient, respectful, non-threatening, non-judgmental and empathetic manner	2 hours	Bed side clinic
		26.21 & 26.22	- Demonstrate respect to patient privacy		Bed side

Week / Day	Day of the week	Competency Nos.	Topics & Subtopics	Duration	TL Method
			-Demonstrate ability to maintain confidentiality in patient care	1 hour	clinic
1/5	Friday	26.35	Demonstrate empathy in patient encounters	1 hour	Bed side clinic
		6.7	Elicit document and present a medical history that helps delineate the aetiology of the current presentation and includes risk factors for HIV, mode of infection, other sexually transmitted diseases, risks for opportunistic infections and nutritional status	1 hour	Bed side clinic
		26.19 , 26.24 & 26.25	- Demonstrate ability to work in a team of peers and superiors - Demonstrate respect in relationship with patients, fellow team members, superiors and other health care workers - Demonstrate responsibility and work ethics while working in the health care team	1 hour	Bed side clinic
2/1	Monday	1.11, part 1.29	Orientation to General Exam	3 hours	Bed side clinic
2/2	Tuesday	1.12	Pulse examination with demonstration	3 hours	Bed side clinic /DOAP
2/3	Wednesday	1.13	Measure BP accurately	2 hours	Bed side clinic /DOAP
		1.14	JVP	1 Hour	Bed side clinic /DOAP
2/4	Thursday	4.9	Evaluation of fever	1.5 hours	Bed side clinic/DOAP
		4.10	Examination of skin ,lymph node, chest and abdominal examination	1.5 hours	Bed side clinic/DOAP
2/5	Friday	9.4	Perform a systematic examination that includes : general examination for pallor, oral examination	1 hour	Bed side clinic
		4.21	Orientation to Clinical decision making	2 hours	Bed side clinic
3/1	Monday	7.11 and 7.12	Orientation to medical history and examination of joints ,muscle and skin rheumatological diseases	1hour	Bed side clinic
		11.8	Perform a systematic examination that establishes the diagnosis and severity that includes skin, peripheral pulses, blood pressure measurement, fundus examination, detailed examination of the foot (pulses, nervous and deformities and injuries) in a patient	1 hour	Bed side clinic

Week / Day	Day of the week	Competency Nos.	Topics & Subtopics	Duration	TL Method
			with diabetes		
		Practice session for clinical skills including BP Measurement/ ward rounds		1 hour	Bed side clinic
3/2	Tuesday	1.30	**Skill Acquisition -** IM injection	3 hour	Skills lab
3/3	Wednesday	5.9	Elicit document and present a medical history that helps delineate the aetiology of the current presentation and includes clinical presentation, risk factors, drug use, sexual history, vaccination and family history in patient with liver disease.	1 hour	Bed side clinic
		16.5	Perform, document and demonstrate a physical examination based on the history that includes general examination, including an appropriate abdominal examination	1 hour	Bed side clinic
		5.14	Outline a diagnostic approach to liver disease based on hyperbilirubinemia, liver function changes and hepatitis serology	1 hours	Bed side clinic
3/4	Thursday	2.7	CVS Examination with demonstration	3 hour	Bed side clinic/DOAP
3/5	Friday	3.4 & 3.5	Orientation to history taking, general examination & systemic examination of Respiratory system	3 hours	Bed side clinic/DOAP
4/1	Monday	18.3	Elicit and document and present an appropriate history including onset, progression, precipitating and aggravating relieving factors, associated symptoms that help identify the cause of the cerebrovascular accident	2 hours	Bed side clinic
		Practice session for clinical and other skills/ ward rounds		1 hour	Bed side clinic / skills lab
4/2	Tuesday	18.5	Perform, demonstrate & document physical examination that includes general and a detailed neurologic examination as appropriate based on the history	2 hours	Bed Side clinic
		Practice session for clinical and other skills/ ward rounds		1 hour	Bed side clinic / skills lab
4/3	Wednesday	20.4 & 20.5	**Medical emergency** - - Elicit and document and present an appropriate history, the circumstance, time, kind of snake, evolution of symptoms in a patient with snake bite	2 hours	Bed side clinic

Week / Day	Day of the week	Competency Nos.	Topics & Subtopics	Duration	TL Method
			- Perform a systematic examination, document and present a physical examination that includes general examination, local examination, appropriate cardiac and neurologic examination in a case of snake bite		
		Practice session for clinical and other skills/ward rounds		1 hour	Bed side clinic / skills lab
4/4	Thursday	**Practical Assessment + Theory Assessment**		3 hours	Case presentation
4/5	Friday	**Skills Assessment** – Certifiable skills and soft skills **Logbook Certification**		3 hours	OSCE stations/ skills stations
Student Doctor method of clinical teaching – on the emergency day/ admission day of the clinical unit, students will be posted in admission area (Casualty / EMS) and allotted a case/ cases, which they will be following over the period of indoor stay and the same will be entered in the Logbook. **Focus of Learner-Doctor programme** - History taking, physical examination, assessment of change in clinical status, communication and patient education					

* Day of week is only suggestive, considering the posting is started on Monday. If posting is commenced on any other day, day of week can be modified accordingly.

Maharashtra University of Health Sciences

General Medicine

Second MBBS (from Feb/March 2021)

Subject: GENERAL MEDICINE Theory

(Based on Medical Council of India, Competency based Undergraduate curriculum for the Indian Medical Graduate, 2018. Vol. 2; page nos. 60-142)

1. Total Teaching hours : **25h + 60h**
2. A. Lectures(hours): **25h** B. Self directed learning (hours) :**NIL**

C. Clinical Postings (hours): 4 Wks (60h)

D. Small group teachings/tutorials/Integrated teaching/Practicals(hours)**: NIL**

Lecture	Competency Nos.	Topic	Subtopics
1	IM 4.1 to 4.5	Fever & Febrile Syndromes	**Introduction to Fever, Pathophysiology, Causes-** Describe and discuss the febrile response and the influence of host immune status, risk factors and comorbidities on the febrile Response, Describe and discuss the influence of special populations on the febrile response including: the elderly, immune suppression, malignancy and neutropenia, HIV and travel, Discuss and describe the common causes, pathophysiology and manifestations of fever in various regions in India including bacterial, parasitic and viral causes (e.g.Dengue, Chikungunya, Typhus), inflammatory causes of fever, malignant causes of fever including hematologic and lymph node malignancies
2	IM 4.6; 4.15; 4.22 to 4.26	Fever & Febrile Syndromes	**Malaria -** Discuss and describe the pathophysiology and manifestations of malaria, interpret a malarial smear, Describe and discuss the pharmacology, indications, adverse reactions, interactions of antimalarial drugs and basis of resistance, malarial prevention
3	IM 4.7	Fever & Febrile Syndromes	**Sepsis Syndrome -** Discuss and describe the pathophysiology and manifestations of the sepsis syndrome
4	IM 4.8; 4.16; 4.18	Fever & Febrile Syndromes	**FUO-** Discuss and describe the pathophysiology, aetiology and clinical manifestations of fever of unknown origin (FUO) including in a normal host, neutropenic host, nosocomial host and a host with HIV disease **,** Enumerate the indications and describe the findings in tests of inflammation and specific rheumatologic tests, serologic testing for pathogens including HIV, bone marrow aspiration and biopsy, Enumerate the indications for use of imaging in the diagnosis of febrile syndromes.

5	IM 25.1; 25.2; 25.3, 25.7,25.8, 25.10,25.11	Infections	Describe and discuss the response and the influence of host immune status, risk factors and comorbidities on zoonotic diseases**,** pathophysiology and manifestations, appropriate diagnostic plan, newer techniques in the diagnosis, empiric treatment plan OF -
			Leptospirosis & Dengue
6		Infections	**Rabies & Tetanus**
7		Infections	**Scrub Typhus, Typhoid**
8		Infections	**Acute encephalitis syndromes including JE**
9	IM 6.1 to 6.3	HIV	Describe and discuss the **symptoms and signs of acute HIV** Seroconversion, Define and **classify HIV AIDS** based on the CDC criteria, Describe and discuss the relationship between CDC count and the risk of opportunistic infections
10	IM 6.4 to 6.6; 6.9	HIV	Describe and discuss the pathogenesis, evolution and clinical features of common HIV related **opportunistic infections, malignancies, skin and oral lesions,** Choose and interpret appropriate **diagnostic tests** to diagnose and classify the severity of HIV-AIDS including specific tests of HIV, CDC
11	IM 6.16 to 6.18	HIV	Discuss and describe the principles of **HAART**, the classes of antiretrovirals used, adverse reactions and interactions, Discuss and describe the principles and regimens used in post exposure prophylaxis, Enumerate the indications and discuss prophylactic drugs used to prevent HIV related opportunistic infections
12	IM 16.1; 16.13; 16.14; 16.6	Diarrheal Diseases	Describe and discuss the aetiology of **acute and chronic diarrhea** including infectious and noninfectious causes, Distinguish between diarrhea and dysentery based on clinical features, Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy for parasitic, bacterial and viral causes of diarrhea
13	IM 16.11; 16.12	Diarrheal Diseases	**Diagnosis** of acute diarrhea (Stool culture & Blood culture); Diagnosis of chronic diarrhea (Antibodies, colonoscopy, imaging & biopsy)
14	IM 16.2; 16.3	Diarrheal Diseases	Describe and discuss the **acute systemic consequences of diarrhea** including its impact on fluid balance, Describe and discuss the chronic effects of diarrhea including malabsorption
15	IM 16.15-16.17	Diarrheal Diseases	Distinguish based on the clinical presentation **Crohn's disease from Ulcerative Colitis,** Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy including immunotherapy, the indications for surgery in **inflammatory bowel disease**
16	IM 3.2,3.3	Pneumonia	Discuss and describe the etiologies of various kinds of **pneumonia** and their microbiology depending on the setting and immune status of the host, Discuss and describe the pathogenesis, presentation, natural history and complications of pneumonia
17	IM 3.1	Pneumonia	Define, discuss, describe and distinguish **community acquired pneumonia, nosocomial pneumonia and aspiration pneumonia**

18	IM 3.15; 3.16	Pneumonia	Describe and enumerate **the indications for hospitalization** in patients with pneumonia, Describe and enumerate the indications for **isolation and barrier nursing** in patients with pneumonia
19	IM 3.17; 3.19	Pneumonia	Describe and discuss the **supportive therapy** in patients with pneumonia including oxygen use and indications for ventilation, Discuss, describe, enumerate the indications and communicate to patients on pneumococcal and influenza **vaccines**
20	IM 20.1; 20.3; 20.7	Envenomation	Enumerate the local poisonous snakes and describe the distinguishing marks of each, Describe the initial approach to the stabilization of the patient who presents with **snake bite**, Enumerate the indications and describe the pharmacology, dose, adverse reactions, hypersensitivity reactions of **anti snake venom**.
21	IM 20.8; 20.9	Envenomation	Describe the diagnosis, initial approach stabilization and therapy of **scorpion envenomation** and **bee sting allergy**
22	IM 21.1 to 21.3	Poisoning	Describe the initial approach to the stabilization of the patient who presents with poisoning, Enumerate the **common plant poisons** seen in your area and describe their toxicology, clinical features, prognosis and specific approach to detoxification, **common corrosives poisoning**.
23	IM 21.4	Poisoning	Enumerate the commonly observed **drug overdose** in your area and describe their toxicology, clinical features, prognosis and approach to therapy
24	IM 23.1, 23.4	Nutrition & Vitamin Deficiencies	Discuss and describe the methods of **nutritional assessment** in an adult and calculation of caloric requirements during illnesses, Enumerate the indications for **enteral and parenteral nutrition** in critically ill patients
25	IM 23.2; 23.3	Nutrition & Vitamin Deficiencies	Discuss and describe the causes and consequences of **protein caloric malnutrition** in the hospital, Discuss and describe the aetiology, causes, clinical manifestations, complications, diagnosis and management of **common vitamin deficiencies**

Maharashtra University of Health Sciences

General Medicine

Third professional Part I MBBS

Subject: General Medicine

Theory - Lectures + SDL + Tutorials, Seminars, Integrated

(Based on Medical Council of India, Competency based Undergraduate curriculum for the Indian Medical Graduate, 2018. Vol. 2)

1. Total Teaching hours : **25+ 35+ 5+72**
2. A. Lectures(hours): **25** B. Self-directed learning (hours) : **05**
   C. Clinical Postings (hours): 72
   D. Small group teachings/tutorials/Integrated teaching/Practicals (hours)**: 35**

Lecture / SDL	Competency Nos.	Topic	Subtopics
1	IM 9.1; 9.2	**Anaemia**	Classification of anemia; Etiology & Prevalence
2	IM 9.7; 9.8,9.21	Anaemia	Components of hemogram; Tests for Iron deficiency & Vit. B12 Deficiency. Determine the need for specialist consultation.
3	IM 9.11; 9.12	Anaemia	Diagnostic plan for evaluation of anemia including BMA & Biopsy
4	IM 9.17; 15.12,9.18,	Anaemia	Indication for Blood transfusion & components; Precautions during transfusion including mismatch transfusion.
SDL-1	IM 9.14	Anaemia	National programs for prevention of anemia
5	IM 14.1 to 14.4	**Obesity**	Definition, prevalence, etiology, risk factors including monogenic forms, environmental factors of obesity
6	IM 14.5; 14.9, 14.10,14.13; 14.14;14.15	Obesity	Natural history, complications, laboratory tests , pharmacotherapy and bariatric surgery of obesity and prevention of obesity
7	IM 15.1; 15.6	**GI Bleed**	Etiology and distinguishing features of UGI and LGI Bleed
8	IM 15.2 ; 15.3; 15.11	GI Bleed	Physiological effects, Evaluation and steps in stabilizing a patient with acute volume loss due to GI bleed; including blood and component transfusion

9	15.14; 15.10; 15.15,15.16, 15.17	GI Bleed	Investigation (endoscopy, colonoscopy, imaging) and treatment of GI bleed including pharmacotherapy of acid peptic disease (including H.pylori), pressors, endoscopic interventions and surgery and appropriate level of specialist consultation
10	IM 5.1; 5.2; 5.3, 5.5; 5.7	**Liver Diseases**	Etiology, Pathophysiology of hyperbilirubinemia and various forms of liver disease including alcoholic liver disease and drug induced liver injury
11	IM 5.4,5.16, 5.17	Liver Diseases	Epidemiology, microbiology, immunology, clinical evolution of infective (viral) hepatitis and it' management including vaccination.
12	IM 5.12, 13, 14	Liver Diseases	Outline a diagnostic approach to liver disease based on CBS, hyperbilirubinemia, Ascitic fluid examination, liver function changes and hepatitis serology. Enumerate the indications for ultrasound and other imaging studies including MRCP and ERCP and describe the findings in liver disease.
13	IM 5.6,5.18	Liver Diseases	Pathophysiology, evolution, management and Complication of cirrhosis and portal hypertension, indications for hepatic transplantation.
SDL-2	IM 5.8	Liver Diseases	Cholelithiasis and cholecystitis
14	IM 11.1 to 11.4	**Diabetes**	Definition, classification of Diabetes; Epidemiology, Pathogenesis, Genetics, Risk factors and Clinical evolution of Type-1 & -2 DM
15	IM 11.6; 11.9; 11.11, 11.14; 11.15; 11.22 to 11.24	Diabetes	Pathogenesis, C/F, Precipitating factors, Stabilization, Principle of therapy & Management (Investigations & treatment) of diabetic emergencies (Hypoglycemia, DKA, HONKS).
16	IM 11.16; 11.17	Diabetes	Pharmacological therapies for DM, indications, CI, ADR and Interaction- Based on presentation, severity, complication in a cost effective therapy
17	IM 11.5	Diabetes	Pathogenesis, temporal evolution of microvascular and macrovascular complications of diabetes (Neuropathy, Nephropathy, Retinopathy, HTN,
SDL 3	IM 11.18	Diabetes	Pharmacology, indications, ADR and interactions of drugs used in treatment and prevention of target organ damage and chronic complications of diabetes

18	IM 7.1; 7.2, 7.27	Rheumatologic Problems	Pathophysiology and genetic basis of autoimmune disease and determine the need for specialist consultaion
19	IM 7.3 to 7.6; 7.8	Rheumatologic Problems	Pathophysiology, classification, presenting features, approach, and etiology of joint pain; differentiate arthritis from arthralgia
20	IM 7.10, 7.14,7.15,7,17 ,7,19	Rheumatologic Problems	Describe appropriate diagnostic workup and treatment plan for rheumatological diseases. Enumerate Systemic manifestations of rheumatological diseases,
SDL 4	IM 7.7; 7.9; 7.16	Rheumatologic Problems	Articular from periarticular symptoms; Signs and symptoms of articular and periarticular diseases, Indications for Arthocentesis.
21	IM 12.3; 12.4	Thyroid Dysfunction	Principles of Thyroid function tests, Principles of RAI uptake, alteration of physiological function along with physiology of HPT axis
22	IM 12.1; 12.2; 12.11,12.12; 12.13, 12.14	Thyroid Dysfunction	Epidemiology, pathogenesis, genetic basis of Hypothyroidism, interpretation of TFT, Pharmacotherapy, indication, ADR of Thyroxine. Iodization programmes of Govt of India
23	IM 12.1; 12.2; 12.11,12.13, 12.4; 12.14	Thyroid Dysfunction	Epidemiology, pathogenesis, genetic basis of Hyperthyroidism; interpretation of TFT, Pharmacotherapy, indication, ADR of Anti-thyroid drugs
24	IM 13.1 to 13.3	Common Malignancies	Epidemiology, Genetic Basis, Risk factors for common malignancies in India; Infections causing cancer
25	IM 13.4	Common Malignancies	Natural history, presentation, course, complication and cause of death for common cancers
SDL 5	IM 13.5,13.6, 13.18, 13.19	Common Malignancies	Describe the common issues encountered in patients at the **end of life** and principles of management, Describe and distinguish the difference between curative and **palliative care** in patients with cancer, Describe and discuss the ethical and the medico legal issues involved in end of life care, Describe the therapies used in alleviating suffering in patients at the end of life

Tutorials/Seminars/Integrated teachings- 35 hours			
Tutorials- Total 10 hours			
S. No.	**Topics**		**Hours**
1.	Medical emergencies – Common poisonings		1 hr
2.	Medical emergencies - related to Pharmacological agents		1 hr
3.	Drugs – IV fluids and pain killers including Narcotics		1 hr
4.	Drugs – used in CPR		1 hr
5.	Instruments – for various injections and IV access		1 hr
6.	Instruments - for routine invasive procedures		1 hr
7.	X rays – Format of reading X-ray chest, skeletal and pleural involvement in X-ray Chest		1 hr
8.	X rays – Parenchymal involvement in X-ray chest		1 hr
9.	ECG – Basics of reporting ECG ,with abnormal rate		1 hr
10	ECG – Rhythm disturbances		1 hr
Seminars- Total 16 hours			
S. No.	**Topics**		**Hours**
1.	Clinical approach to Ascites		1 hr
2.	Clinical approach to Anaemia		1 hr
3.	Clinical approach to lymphadenopathy		1 hr
4.	Clinical approach to Jaundice		1 hr
5.	Clinical approach to chest pain		1 hr
6.	Clinical approach to headache		1 hr
7.	Clinical approach to bleeding diathesis		1 hr
8.	Clinical approach to Comatose patient		1 hr
9.	Portal hypertension and its complications		1 hr
10	Pulmonary arterial hypertension		1 hr
11	Pulmonary function tests		1 hr
12	Thyroid function tests		1 hr
13	Grave's disease		1 hr
14	Micro-vascular complications of DM		1 hr
15	Macro-vascular complications of DM		1 hr
16	Insulin and analogues		1 hr
Integration – Total 9 hours			
S.No.	**Subject**	**Topics for integration**	**Hours**
1.	Clinical Pharmacology	Clinical pharmacokinetics	01
		Drug-Drug interaction	01
		Adverse drug reaction	01
2.	Clinical Pathology	Anaemia and haemoglobinopathies	01
		Platelet disorder	01
		Hematological malignancies	01
3.	Clinical Microbiology	Biologicals and disease modifying agents	01
		Antimicrobial resistance	01
		Viral haemorrhagic fever	01

Maharashtra University of Health Sciences

General Medicine

Third professional Part I MBBS

Subject: General Medicine

Clinical Posting (4 weeks, 6 days a week, 3 hours per day)

(Based on Medical Council of India, Competency based Undergraduate curriculum for the Indian Medical Graduate, 2018. Vol. 2)

1. Total Teaching hours : **25+ 35+ 5= 65**
2. A. Lectures(hours): **25** B. Self-directed learning (hours) : **05**
   C. Clinical Postings (hours): **72**
   D. Small group teachings/tutorials/Integrated teaching/Practicals (hours)**: 35**

Clinical skills hours	Procedural Skills hours	Assessment hours	Total
54	**12**	**06**	**72**

Maharashtra University of Health Sciences

General Medicine

Fourth professional Year III/II MBBS

Subject: General Medicine

Theory - Lectures + SDL + Tutorials, Seminars, Integrated

(Based on Medical Council of India, Competency based Undergraduate curriculum for the Indian Medical Graduate, 2018. Vol. 2)

1. Total Teaching hours :70+ 125+15 + 144+ 72 = 426
2. A. Lectures(hours): **70** B. Self-directed learning (hours) :15
   C. Clinical Postings (hours): 144 + 72= 216
   D. Small group teachings/tutorials/Integrated teaching/Practicals (hours)**:** 125

Lecture / SDL	Competency Nos.	Topic	Subtopics
1	IM 8.1 to 8.5	**Hypertension**	Define and classify hypertension, Describe and discuss the epidemiology, etiology, prevalence, pathophysiology and genetic basis of essential hypertension, Describe and discuss the differences between primary and secondary hypertension
2	IM8.7,8.1	Hypertension	Describe and discuss epidemiology, aetiology and the prevalence of secondary HT and the clinical manifestations of the various aetiologies of secondary causes of hypertension
3	IM8.6	Hypertension	Define, describe and discuss and recognize hypertensive urgency and emergency
4	IM 8.8, 8.20	Hypertension	Describe, discuss and identify target organ damage due to hypertension, Determine the need for specialist consultation
SDL 1	IM 8.12,8.13	Hypertension	Describe the appropriate diagnostic work up based on the presumed aetiology, Enumerate the indications for and interpret the results of : CBC, Urine routine, BUN, Cr, Electrolytes, Uric acid, ECG
SDL 2	IM 8.14	Hypertension	Develop an appropriate treatment plan for patient with hypertension
5	IM 1.1, 1.2	Heart Failure	Describe and discuss the epidemiology, pathogenesis clinical evolution and course of common causes of heart

			disease including: rheumatic/valvular, ischemic, hypertrophic, inflammatory. Describe and discuss the genetic basis of some forms of heart failure.
6	IM 1.3 (part)	Heart Failure	Describe and discuss the aetiology, microbiology pathogenesis and clinical evolution of rheumatic fever, criteria, degree of rheumatic activity and Rheumatic valvular heart disease.
7	IM1.9	Heart Failure	Describe and discuss the clinical presentation and features, diagnosis, recognition and management of acute rheumatic fever
8	IM 1.3 (part) IM 1.27	Heart Failure	Describe Complications of Rheumatic valvular heart disease. (Other than Infective Endocarditis), Describe and discuss the role of penicillin prophylaxis in the prevention of rheumatic heart disease
SDL 3	IM 1.25	Heart Failure	Enumerate the indications for valvuloplasty, valvotomy, coronary revascularization and cardiac transplantation
9	IM1.3 (part), 1.21	Heart Failure	Describe and discuss and identify the clinical features of acute and sub-acute endocarditis, echocardiographic findings, blood culture and sensitivity and therapy
10	IM1.4,1.5,1.6	Heart Failure	Staging of heart failure, Describe, discuss and differentiate the processes involved in R Vs L heart failure, systolic vs diastolic failure, Describe and discuss the compensatory mechanisms involved in heart failure including cardiac remodeling and neuro-hormonal adaptations
11	IM1.7	Heart Failure	Enumerate, describe and discuss the factors that exacerbate heart failure including ischemia, arrhythmias, anemia, thyrotoxicosis, dietary factors drugs etc.
12	IM 1.8	Heart Failure	Describe and discuss the pathogenesis and development of common arrhythmias involved in failure particularly atrial fibrillation
13	IM 1.19	Heart Failure	Enumerate the indications for and describe the **findings of heart failure** with the following : 2D echocardiography, brain natriuretic peptide, exercise testing, nuclear medicine testing and coronary angiogram
14	IM 1.24	Heart Failure	Describe and discuss the **pharmacology of drugs** including indications, contraindications in the

			management of heart failure including diuretics, ACE inhibitors, Beta blockers, aldosterone antagonists and cardiac glycosides
15	IM 1.28	Heart Failure	Enumerate the causes of **adult presentations of congenital heart disease** and describe the distinguishing features between cyanotic and acyanotic heart disease
16	IM 2.1 ,2.2, 2.4	AMI/IHD	Discuss and describe the epidemiology, antecedents and risk factors both modifiable and non-modifiable, the pathogenesis, natural history, evolution and complications of **atherosclerosis and IHD.**
SDL 4	IM 2.3	AMI/IHD	Discuss and describe the lipid cycle and the role of dyslipidemia in the pathogenesis of atherosclerosis
17	IM 2.5	AMI/IHD	Define the various acute coronary syndromes and describe their evolution, natural history and outcomes
18	IM 2.13	AMI/IHD	Discuss and enumerate the indications for and findings on echocardiogram, stress testing and coronary angiogram
19	IM 2.14,2.15, 2.16	AMI/IHD	Discuss and describe the indications for admission to a coronary care unit and supportive therapy for a patient with acute coronary syndrome. Discuss and describe the medications used in patients with an acute coronary syndrome based on the clinical presentation. Discuss and describe the indications for acute thrombolysis, PTCA and CABG.
SDL 5	IM 2.17	AMI/IHD	Discuss and describe the indications and methods of cardiac rehabilitation.
20	IM 2.18	AMI/IHD	Discuss and describe the indications, formulations, doses, side effects and monitoring for drugs used in the management of dyslipidemia
21	IM 2.19	AMI/IHD	Discuss and describe the pathogenesis, recognition and management of complications of acute coronary syndromes including arrhythmias, shock, LV dysfunction, papillary muscle and pericarditis
22	IM ,2.20	AMI/IHD	Discuss and describe the assessment and relief of pain in acute coronary syndromes
23	IM 2.23	AMI/IHD	Describe and discuss the indications for nitrates, anti platelet agents, gpIIb IIIa inhibitors, beta blockers, ACE

			inhibitors etc in the management of coronary syndromes
24	IM 17.1,17.6, 17.10	Headache	Define and classify **headache** and describe the presenting features, precipitating factors, aggravating and relieving factors of various kinds of headache. Choose and interpret diagnostic testing based on the clinical diagnosis including imaging. Enumerate the indications for emergency care admission and immediate supportive care in patients with headache.
25	IM 17.3,17.11, 17.12	Headache	Classify **migraine** and describe the distinguishing features between classical and non-classical forms of migraine. Describe the indications, pharmacology, dose, side effects of abortive therapy and prophylactic therapy in migraine.
26	IM 17.13	Headache	Describe the pharmacology, dose, adverse reactions and regimens of drugs used in the treatment of bacterial, tubercular and viral **meningitis.**
SDL 6	IM 18.1	Cerebrovascular accident	Describe the functional and the vascular anatomy of the brain
27	IM 18.2	Cerebrovascular accident	Classify cerebrovascular accidents and describe the aetiology, predisposing genetic and risk factors pathogenesis of hemorrhagic and non-hemorrhagic stroke
28	IM 18.10	Cerebrovascular accident	Choose and interpret the appropriate diagnostic testing in young patients with a cerebrovascular accident (CVA)
29	IM 18.11	Cerebrovascular accident	Describe the initial supportive management of a patient presenting with a cerebrovascular accident (CVA)
30	IM 18.12,18.13	Cerebrovascular accident	Enumerate the indications for and describe acute therapy of non-hemorrhagic stroke including the use of thrombolytic agents and anti-platelet agents
31	IM18.14, 18.15	Cerebrovascular accident	Describe the initial management of a hemorrhagic stroke. Enumerate the indications for surgery in a hemorrhagic stroke.
SDL 7	IM 18.16	Cerebrovascular accident	Enumerate the indications describe and observe the multidisciplinary rehabilitation of patients with a CVA
SDL 8	IM 19.1	Movement disorders	Describe the functional anatomy of the locomotor system of the brain
32	IM 19.2,19.3,IM	Movement disorders	Classify movement disorders of the brain based on distribution, rhythm, repetition, exacerbating and relieving factors, clinical approach to movement

	19.7		disorders.
33	IM 19.8	Movement disorders	Discuss and describe the pharmacology, dose, side effects and interactions used in the drug therapy of Parkinson's syndrome
34	IM19.7,19.9	Movement disorders	Choose and interpret diagnostic and imaging tests in the diagnosis of movement disorders, Enumerate the indications for use of surgery and botulinum toxin in the treatment of movement disorders
35	IM 10.1,10.2	AKI and CRF	Define, describe and differentiate between acute and chronic renal failure, Classify, describe and differentiate the pathophysiologic causes of acute renal failure
36	IM 10.3, 10.4	AKI and CRF	Describe the pathophysiology and causes of pre renal ARF, renal and post renal ARF, Describe the evolution, natural history and treatment of ARF
37	IM 10.5,10.6, 10.7	AKI and CRF	Describe and discuss the aetiology of CRF, Stage Chronic Kidney Disease, Describe and discuss the pathophysiology and clinical findings of uremia
38	IM 10.15,10.16, 10.17,10.19	AKI and CRF	Describe **the appropriate diagnostic work up** based on the presumed aetiology, Enumerate the indications for and interpret the results of : renal function tests, calcium, phosphorus, PTH, urine electrolytes, osmolality, Anion gap, Describe and calculate indices of renal function based on available laboratories including FENa (Fractional Excretion of Sodium) and CrCl (Creatinine Clearance), Enumerate the indications and describe the findings in renal ultrasound
39	IM10.8 , 10.9 10.10 ,10.11	AKI and CRF	Classify, describe and discuss the significance of proteinuria in CKD, Describe and discuss the pathophysiology of anemia and hyperparathyroidism, Describe and discuss the association between CKD glycaemia and hypertension, Describe and discuss the relationship between CAD risk factors and CKD.
40	IM 10.25	AKI and CRF	Identify and describe the priorities in the management of ARF including diet, volume management, alteration in doses of drugs, monitoring and indications for dialysis
41	IM 10.26	AKI and CRF	Describe and discuss supportive therapy in CKD including diet, anti hypertensives, glycemic therapy, dyslipidemia, anemia, hyperkalemia, hypophosphatemia and

			secondary hyperparathyroidism
42	IM 10.27,10.28	AKI and CRF	Describe and discuss the indications for renal dialysis, Describe and discuss the indications for renal replacement therapy
SDL 9	IM 10.29, 10.30,10.31	AKI and CRF	Describe discuss and communicate the ethical and legal issues involved in renal replacement therapy, Recognize the impact of CKD on patient's quality of life, wellbeing , work and family, Incorporate patient preferences in to the care of CKD
43	IM 22.1,22.2, 22.3	Fluid Electrolyte & Acid base Disorder	Enumerate the causes of **hypercalcemia** and distinguish the features of PTH vs non PTH mediated hypercalcemia, Describe the aetiology, clinical manifestations, diagnosis and clinical approach to primary hyperparathyroidism, Describe the approach to the management of hypercalcemia
44	IM 22.4	Fluid Electrolyte & Acid base Disorder	Enumerate the components and describe the genetic basis of the **multiple endocrine neoplasia syndrome**
45	IM 22.5,22.6	Fluid Electrolyte & Acid base Disorder	Enumerate the causes and describe the clinical features and the correct approach to the diagnosis and management of the patient with **Hyponatremia and hypernatremia**
46	IM 22.7,22.8	Fluid Electrolyte & Acid base Disorder	Enumerate the causes and describe the clinical and laboratory features and the correct approach to the diagnosis and management of the patient with **hypokalemia and hyperkalemia**
47	IM 22.9,22.10, 22.11, 22.12	Fluid Electrolyte & Acid base Disorder	Enumerate the causes and describe the clinical and laboratory features of **metabolic acidosis, metabolic alkalosis, respiratory acidosis, respiratory alkalosis**
SDL 10	IM 24.18,24.19, 24.21	Geriatrics	Describe the impact of the **demographic changes** in ageing on the population, Enumerate and describe the **social problems** in the elderly including isolation, abuse, change in family structure and their impact on health and discuss **ethical issues** in care of elderly.
48	IM 24.1, 24.3, 24.5 to 25.7	Geriatrics	Describe and discuss the epidemiology, pathogenesis, clinical evolution, presentation and course of common diseases in the elderly, Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization,

			management and rehabilitation of **acute confusional states, depression, dementia and personality changes in elderly.**
49	IM 24.10	Geriatrics	Describe and discuss the etiopathogenesis causes, clinical presentation, difference in clinical presentation identification, functional changes, acute care, stabilization, management and rehabilitation of **COPD in the elderly.**
50	IM 24.4,24.9	Geriatrics	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of**, vascular events and CVA in the elderly**
51	IM 24.11	Geriatrics	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of the **elderly undergoing surgery**
52	IM 24.8,24.12, 24.13,24.14	Geriatrics	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of **osteoporosis, degenerative joint disease, falls, and common fractures in elderly**
53	IM 24.15 to 25.17	Geriatrics	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of **vision and visual loss, hearing loss and disabilities in the elderly**
54	IM 24.22	Geriatrics	Describe and discuss the aetiopathogenesis, clinical presentation, complications, assessment and management of **nutritional disorders in the elderly**
SDL 11	IM 24.20	Geriatrics	Enumerate and describe **social interventions** in the care of elderly including domiciliary discussion services, rehabilitation facilities, old age homes and state interventions
55	IM 26.2, 26.23,26.27, 26.38, 26.39,26.42	The role of the physician in the community	**Professional Development –** Describe and discuss the commitment to lifelong learning as an important part of physician growth, Demonstrate a commitment to continued learning, Demonstrate personal grooming that is adequate and appropriate for health care responsibilities, Demonstrate ability to form and

			function in appropriate professional networks, Demonstrate ability to pursue and seek career advancement, Demonstrate commitment to learning and scholarship.
56	IM 26.3,26.4, 26.5,26.11	The role of the physician in the community	**Bioethics in Clinical Practice -** Describe and discuss the role of beneficence, non-maleficence, autonomy and shared responsibility as guiding principles in patient care
57	IM 26.37,26.36	The role of the physician in the community	**Time management** - Demonstrate ability to manage time appropriately, Demonstrate ability to balance personal and professional priorities
58	IM 26.12, 26.13, 26.25	The role of the physician in the community	**Decision making in health care -** Identify, discuss and defend medico legal, socio-cultural and ethical issues as it pertains to decision making in health care including advanced directives and surrogate decision making, decision making in emergency care including situations where patients do not have the capability or capacity to give consent, Identify, discuss and defend, medico legal, socio-cultural and ethical issues as they pertain to consent for surgical procedures
59	Module 4.1	Pandemic module	**Lessons learnt from Covid 19 pandemic – a Narrative**.
60	Module 4.1	Pandemic module	**Individual responsibilities in Pandemic Situation.**
SDL 12	26.47	The role of the physician in the community	**Euthanasia, current position in India** - Identify, discuss and defend medico legal, socio-cultural and ethical issues as they pertain to refusal of care including do not resuscitate and withdrawal of life support
SDL 13	26.8	The role of the physician in the community	**Organ Donation in India -** Identify discuss medico legal, socioeconomic and ethical issues as it pertains to organ donation
SDL 14	Integrated SDL	Community Medicine	**National programs relevant to physicians**
SDL 15	Integrated SDL	Community Medicine	**Adult Immunization and newer vaccines**
61	1	Revision Lecture	Febrile illness
62	2	Revision Lecture	Infections
63	3	Revision Lecture	HIV

64	4	Revision Lecture	Diarrheal Diseases
65	5	Revision Lecture	Pneumonia
66	6	Revision Lecture	Anemia
67	7	Revision Lecture	GI Bleed
68	8	Revision Lecture	Liver Diseases
69	9	Revision Lecture	Diabetes
70	10	Revision Lecture	Thyroid disorders

MBBS Third part - 2 Tutorials/Seminars/Integrated teachings- 125 hours		
Tutorials- ECG- Total 10 hours		
S. No.	**Topics**	**Hours**
1.	Approach to basics of ECG	1 hr
2.	Reading Normal ECG	1 hr
3.	ECG: Chamber enlargement	1 hr
4.	Myocardial Infarction	1 hr
5.	Electrolyte abnormalities on ECG	1 hr
6.	Narrow Complex tacchyarrythmias	1 hr
7.	Bradyarrthmias	1 hr
8.	Valvular Heart diseases	1 hr
9.	Bundle branch blocks	1 hr
10	Miscellaneous	1 hr
X Rays- Total 11 hours		
S. No.	**Topics**	**Hours**
1.	Basics of Chest X Ray	1 hr
2.	Reading Normal X Ray Chest	1 hr
3.	Abnormalities on Chest X Ray – Cardiovascular system	1 hr
4.	Pulmonary venous hypertension vs pulmonary arterial hypertension	1 hr
5.	Chest X ray – Respiratory system	1 hr
6.	Abdominal system(Chest & Abdomen X Ray)	1 hr
7.	Miscelleneous X ray	1 hr
8.	Basics of CT Scan	1 hr
9.	Basics of MRI	2 hr
10.	Basics of PET scan	1 hr
Drugs- Total 21 hours		
S. No.	**Topics**	**Hours**
1.	Anti epileptics	1 hr
2.	Cardiovascular Drugs	1 hr
3.	Anti Tubercular Therapy	1 hr
4.	Anti Retroviral Therapy	1 hr
5.	Emergency Drugs	2 hr
6.	Antiviral Drugs	1 hr
7.	Drugs in respiratory system	1 hr
8.	Glucocorticoids	1 hr
9.	Drugs in Rheumatology	1 hr
10.	Anticoagulants	1 hr
11.	Inotropes and inodilators	2 hr
12.	Anti hypertensives	2 hr
13.	Antidiabetic drugs	2 hr

Interpretation of Lab Charts- Total 14 hours		
S. No.	**Topics**	**Hours**
1.	Interpretation of Ascitic fluid analysis	1 hr
2.	Interpretation of Pleural fluid analysis	1 hr
3.	Interpretation of Cerebrospinal fluid analysis	1 hr
4.	Interpretation of Abnormal LFT	1 hr
5.	Interpretation of Hb, CBC, RBCindices	1 hr
6.	Interpretation of thyroid function test	1 hr
7.	Interpretation of Peripheral blood smear	1 hr
8.	Interpretation of urine analysis	1 hr
9.	Interpretation of Fundus examination	1 hr
10.	Interpretation of renal function tests	1 hr
11.	Interpretation of Bone marrow studies	1 hr
12.	Interpretation of ABG	2 hr
Seminars- Total 50 hours		
S. No.	**Topics**	**Hours**
1.	Clinical approach to Hypertensive emergencies	1 hr
2.	Clinical approach to Acute myocardial infarction	1 hr
3.	Clinical approach to solitary Seizure	1 hr
4.	Clinical approach to ischemic stroke	1 hr
5.	Clinical approach to intracranial bleed	1 hr
6.	Clinical approach to Heart Failure	1 hr
7.	Clinical approach to Acute renal failure	1 hr
8.	Clinical approach to Chronic kidney disease	1 hr
9.	Clinical approach to hyponatremia	1 hr
10	Clinical approach to potassium imbalance disorders	1 hr
11	Clinical approach to disorders of calcium metabolism	1 hr
12	Interpretation of ABG	1 hr
13	Mixed Acid Base disorders	1 hr
14	Emerging Viral Infections	1 hr
15	Clinical approach to Geriatric Syndromes	1 hr
16	Clinical approach to a case of Pulmonary Tuberculosis	1 hr
17	Clinical approach to a case of Extra Pulmonary Tuberculosis	1 hr
18	Clinical Approach to a case of PLHIV	1 hr
19	Clinical approach to opportunistic infections in a case of PLHIV	1 hr
20	Clinical approach to prescription of ART	1 hr
21	Clinical approach to a case of Dengue	1 hr
22	Clinical approach to a case of Complicated malaria	1 hr
23	Recent advances in the diagnosis of tuberculosis	1 hr
24	Vaccines for tuberculosis	1 hr
25	Recent advances in anti retroviral drugs	1 hr
26	Clinical approach to a case of Interstitial lung disease	1 hr
27	Clinical approach to a case of snake bite	1 hr
28	Clinical approach to a case of electric injury	1 hr
29	Clinical approach to a case of acute meningitis	1 hr

30	Clinical approach to a case of Chronic meningitis	1 hr
31	Ageing	1 hr
32	Human Microbiome	1 hr
33	Clinical approach to oncological emergencies	1 hr
34	Clinical approach to a case of Acute Leukemia	1 hr
35	Clinical approach to a case of Chronic leukemia	1 hr
36	Medicolegal, socioeconomic and ethical issues as it pertains to organ donation	1 hr
37	Role of physician in community	1 hr
38	Medicolegal, sociocultural, economic and ethical issues as it pertains to rights, equity and justice in access to health care	1 hr
39	Medicolegal, socio-cultural and ethical issues as it pertains to confidentiality in patient care	1 hr
40	Medicolegal, socio-cultural and ethical issues as it pertains to research in human subjects	1 hr
41	Medicolegal, socio-cultural, professional and ethical issues as it pertains to the physician patient relationship (including fiduciary duty)	1 hr
42	Documentation in health care (including correct use of medical records)	1 hr
43	Use of information technology that permits appropriate patient care and continued learning	1 hr
44	Understanding of the implications and the appropriate procedures and response to be followed in the event of medical errors	1 hr
45	Conflicts of interest in patient care and professional relationships and describe the correct response to these conflicts	1 hr
46	Clinical approach to a case of DIC	1 hr
47	Clinical approach to a case of arthritis	1 hr
48	Clinical approach to a case of multisystem involvement	1 hr
49	Clinical approach to a case of peripheral neuropathy	1 hr
50	Clinical approach to a case of flaccid quadriparesis	1 hr

Integrated teachings -MBBS Third part 2 (Total 19 hours)

S.No.	Subject	Hours	Topics for integration
1.	Care of patients during Pandemics	6 hours	Interactive Discussion- 2 hours Triage practices to be followed Primary care to be given to a patient on reaching hospital Steps t be taken to reduce transmission of infections in emergency area Role Play- 1 hour Visit to hospital with discussion with staff- 2 hour Debriefing and feedback- 1 hour
2.	Emergency Procedures during Pandemics	8 hours	Interactive Discussion – 2 hours 1. Indications for invasive procedures in Pandemics 2. Points to be verified before emergency procedures 3. Steps to be taken to reduce transmission of infections 4. Attitude and Communication Issues related to complicated procedures II. Skill development program – with mannequins e.g. intubation, CPR, ALS, PALS etc - 4 hours (This may be linked with the routine Skill training component as well)

			III. Role Plays for communication skills and documentation - 1 hour IV. Debriefing and Feedback -1hour
3.	Managing Death during Pandemics	2 hours	Interactive discussion – 1 hour a. Confirmation and documentation of death b. Steps to be taken to reduce transmission of infections c. Attitude and Communication Issues related to handling of dead bodies d. Responding to media ii. Role Play for communication skills and documentation with debriefing and feedback - 1 hour
4.	Geriatrics	3 hr	Polypharmacy Falls Incontinence

Maharashtra University of Health Sciences
General Medicine

Fourth professional Part II MBBS

Subject: General Medicine

Clinical Posting (8+4 weeks, 6 days a week, 3 hours per day)

(Based on Medical Council of India, Competency based Undergraduate curriculum for the Indian Medical Graduate, 2018. Vol. 2)

1. Total Teaching hours : 70+ 125+15 + 144+ 72 = 426
2. A. Lectures(hours): **70** B. Self-directed learning (hours) : **15**
   C. Clinical Postings (hours): 144+72 = 216
   D. Small group teachings/tutorials/Integrated teaching/Practicals (hours)**: 125**

Term I/II

Posting	Clinical skills hours	Procedural Skills hours	Assessment hours	Total hours
Third clinical posting of 8 weeks	**118**	**20**	**06**	**144**
Revision posting of 4 weeks	**72**			

Note - The details of day to day schedule of 144+ 72 hours as per clinical, procedural and attitudinal internal medicine competencies to be taught will be submitted later (please see second professional year clinical posting)

Maharashtra University of Health Sciences

Internal Assessment
General Medicine

Phase	IA – 1 -Exam			IA – 2 -Exam		
	Theory (Gen Med only) **(January)**	**Practical EOP**	**Total Marks**	**Theory** (Gen Med only) **(May)**	Practical of Allied	**Total Marks**
Second MBBS	**50**	**50**	**100**	**50**	**50 (divided into three allied subjects as follows)**	**100**
					DVL = 15 marks	
					Psychiatry = 15 marks	
					Respiratory Medicine = 20 marks	

* The marks for internal assessment – 2 shall be communicated by DVL, Psychiatry and Respiratory Medicine departments to General Medicine department immediately after completion of examination and assessment.

Phase	IA – 3 -Exam			IA – 4 -Exam		
	Theory **(Gen Med and** Allied) **(January)**	Practical **EOP (Including** 10 marks for Journal / Log Book)	**Total Marks**	Theory **(Gen Med and Allied)** (April)	Practical of Allied	**Total Marks**
Third MBBS Part I	**50**	**40+10=50**	**100**	**50**	**50 (divided into two allied subjects as follows)**	**100**
					DVL = 25 marks	
					Psychiatry = 25 marks	

* The marks for internal assessment – 4 shall be communicated by DVL and Psychiatry departments to General Medicine department immediately after completion of examination and assessment.

Phase	IA – 5 -Exam			Prelim Exam		
	Theory **(General Medicine and** Allied) **(May)**	Practical **EOP (Including 10 marks for Journal / Log Book)**	**Total Marks**	Theory **General Medicine and Allied)** (November)	Practical	**Total Marks**
Third MBBS Part II	**100**	**90+10=100**	**200**	**100 x 2 papers = 200**	**200**	**400**

There will be End of Postings Exam at each end of posting. (There will be FORMATIVE ASSESSMENT at the End of four weeks Clinical Posting of General Medicine NOT to be added to INTERNAL ASSESSMENT).

Assessment in CBME is ONGOING PRCESS,

No Preparatory leave is permitted.

1. There shall be 6 internal assessment examinations in General Medicine including allied.

2. The suggested pattern of question paper for internal assessment, except prelim examination is attached at the end. Pattern of the prelims examinations should be similar to the University examinations.

3. Internal assessment marks for theory and practical will be converted to out of 50 (theory) +50 (practical). Internal assessment marks, after conversion, should be submitted to university within the stipulated time as per directives from the University. **Conversion Formula for calculation of marks in internal assessment examinations.**

	Theory	Practical
Phase II	**100**	**100**
Phase III/I	**100**	**100**
Phase III/II	**300**	**300**
Total	**500**	**500**
Conversion out of	**50**	**50**
Conversion formula	**Total marks in 6 IA theory examinations /10**	**Total marks in 6 IA Practical examinations /10**
Eligibility criteria after conversion	**20**	**20**
	Combined theory + Practical = 50	

4. While preparing Final Marks of Internal Assessment, the rounding-off marks shall done as illustrated in following table.

Total Internal Assessment Marks	Final rounded marks
33.01 to 33.49	**33**
33.50 to 33.99	**34**

5. Students must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in order to be eligible for appearing at the final University examination of that subject.
6. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.

7. **Remedial measures**

A. Remedial measures for non-eligible students

i) At the end of each internal assessment examination, students securing less than 50% marks shall be identified. Such students should be counseled at the earliest and periodically.
ii) Extra classes for such students may be arranged. If majority of the students found to be weak in a particular area then extra classes must be scheduled for all such students. Even after these measures, if a student is failed to secure 50% marks combined in theory and practical (40% separately in theory and practical) after prelim examination, the student shall not be eligible for final examination.
iii) Non eligible candidates are offered to reappear for repeat internal assessment examination/s, which must be conducted 2 months before next University examination. The pattern for this repeat internal assessment examination shall be similar to the final University examination. Only the marks in this examination shall be considered for deciding the eligibility criteria. Following conversion formula shall be used for converting the marks.

	Theory	Practical
Remedial examination (as per final examination pattern)	**200**	**200**
Conversion out of	**50**	**50**
Conversion formula	**Marks in remedial theory examinations /4**	**Marks in remedial Practical examinations /4**
Eligibility criteria after conversion	**20**	**20**
	Combined theory + Practical = 50	

B. <u>Remedial measures for absent students:</u>

i. If any of the students is absent for any of the 6 IA examinations due to any reasons, following measures shall be taken.
ii. The student is asked to apply to the academic committee of the college for reexamination, through HOD, to ascertain the genuineness of the reason for absentee.
iii. If permitted by academic committee, an additional examination for such students is to be conducted after prelims examination. Marks for such additional examination shall be equal to the missed examination.
iv. Even if a student has missed more than one IA examination, he/she can appear for only one additional IA examination. In such scenario, eligibility should be determined by marks obtained in internal assessment examinations for which the candidate has appeared, without changing the denominator.

Internal Assessment Practical Examinations

II MBBS

Internal Assessment - 1

General Medicine

Subject: General Medicine Practical (IA – 1)					
Case	OSCE 1	OSCE 2	Viva	Journal & log book	Practical Total
10	10	10	10	10	50

 # OSCE Stations to include Signs of General examinations, Local examinations, Psychomotor skills and Communication skills.

OSCE DETAILS: 1. History taking of a particular symptom;
2. Demonstration of signs- Pulse/BP/JVP;
3. Identification of General examination findings etc.
4. Communication Skills with patient or relative etc.

Viva on Drugs: Drugs Indication/Contraindication/ Adverse Effects etc.

Viva on emergency : eg. Snake bite, OP poisoning, Status asthmatics etc.

Internal Assessment - 2

DVL, Psychiatry and Respiratory Medicine (to be conducted at the end of respective clinical postings)

Subject: General Medicine Allied Practical (IA – 2) Examination in DVL		
Case	**Viva**	Practical Total
10	5	15
Subject: General Medicine Allied Practical (IA – 2) Examination in Psychiatry		
Case	**Viva**	Practical Total
10	5	15
Subject: General Medicine Allied Practical (IA – 2) Examination in Respiratory Medicine		
Case	**Viva**	Practical Total
15	**5**	**20**

*** The marks for internal assessment – 2 shall be communicated by DVL, Psychiatry and Respiratory Medicine department to General Medicine department immediately after completion of examination and assessment.**

III MBBS Part I

Internal Assessment - 3

General Medicine

Subject: General Medicine Practical (IA – 3)					
Case	OSCE 1	OSCE 2	Viva	Journal & log book	Practical Total
20	5	5	10	10	50

 # OSCE Stations to include Signs of General examinations, Local examinations, Psychomotor skills and Communication skills.

OSCE DETAILS: 1. History taking of a particular symptom;
2. Demonstration of General examination findings;
3. Demonstration of systemic findings
4. AETCOM or Communication Skills with patient or relative.

Internal Assessment - 4

DVL and Psychiatry

Subject: General Medicine Allied Practical (IA – 4) Examination in DVL			
Case	OSCE 1	Viva	Practical Total
10	5	**10**	25

Subject: General Medicine Allied Practical (IA – 4) Examination in Psychiatry			
Case	OSCE 1	Viva	Practical Total
10	5	**10**	25

* **The marks for internal assessment – 4 shall be communicated by DVL / Psychiatry department to General Medicine department immediately after completion of examination and assessment.**

III MBBS Part II

Internal Assessment - 5

General Medicine

Subject: General Medicine Practical (IA – 5)							
Long Case	OSCE1	OSCE2	OSCE 3	OSCE 4	Viva	Journal & log book	Practical Total
50	5	5	5	5	20	10	100

 # OSCE Stations to include Signs of General examinations, Local examinations, Psychomotor skills and Communication skills.

OSCE DETAILS-

1. Demonstration of signs – (Deep Tendon Reflex, Tone, Power of Muscle, Palpation of spleen and liver);
2. Demonstration of systemic findings
3. Certifiable procedural skills
4. AETCOM or Communication Skills with patient or relative etc.

Viva – X-ray, ECG, Instruments, Drugs

MUHS final practical examination

General Medicine

Subject: General Medicine Practical					
Long Case	Short Case – 1	Short Case -2	OSCE * 4 Stations (15 x 4)	Viva (Table 1 – Instruments, Drugs, Emergencies Table 2- X-rays, ECGs, Laboratory reports) (2 tables of 20 marks each)	Practical Total
50	25	25	60	40	200

 # OSCE Stations may include General examinations, Local examinations, psychomotor skills, Communication skills, AETCOM etc.

OSCE 1 – Clinical Skills

OSCE 2 – Certifiable procedural skills

OSCE 3 – Certifiable procedural skills

OSCE 4 – AETCOM related skills

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

Format / Skeleton of question paper for 1st & 2nd internal

Assessment Theory Examinations.

SECTION "A" MCQ

Instructions:

1) *Put ☒ in the appropriate box below the question number once only.*
2) *Use blue ball point pen only.*
3) *Each question carries **One mark.***
4) *Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.*

SECTION "A" MCQ (10Marks)

1. Multiple Choice Questions (Total -10 MCQ of One mark each from General Medicine) (1x1=10)

a) b) c) d) e) f) g) h) i) j)

Instructions:

1) ***Use blue/black ball point pen only.***
2) ***Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.***
3) ***All questions are compulsory.***
4) ***The number to the right indicates full marks.***
5) ***Draw diagrams wherever necessary.***

2. Long Answer Question (Any 2 out of 3) (General Medicine) (2 x 10 = 20)

a) b) c)

3. **Short answer questions (Any 4 out of 5) (At least2 Clinical reasoning question) (General Medicine) (4 x 5 = 20)**

a) b) c) d) e)

Topics for 1st & 2nd internal assessment are according to the syllabus covered till date of respective Internal Assessment examination.

Format / Skeleton of question paper for 3rd and 4th internal Assessment Theory Examinations (III MBBS Part I)

SECTION "A" MCQ

Instructions:

5) *Put ☒ in the appropriate box below the question number once only.*
6) *Use blue ball point pen only.*
7) *Each question carries **One mark.***
8) *Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.*

SECTION "A" MCQ (10Marks)

1. Multiple Choice Questions (Total -10 MCQ of One mark each from General Medicine) (1x10=10)

a) b) c) d) e) f) g) h) i) j)

Instructions:

1) ***Use blue/black ball point pen only.***
2) ***Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.***
3) ***All questions are compulsory.***
4) ***The number to the right indicates full marks.***
5) ***Draw diagrams wherever necessary.***

2. Long Answer Question (Any 2 out of 3) (General Medicine) (2 x 10 = 20)

a) b) c)

***3.* Short answer questions (1 from AETCOM) (General Medicine) (2 x 5 = 10)**

a) b)

4. Short answer questions (Any 2 out of 3) (At least 2 Clinical reasoning question) (DVL, Psychiatry & Respiratory Medicine) (2 x 5 = 10)

a) b) c)

Separate answer sheets for question 4 (SAQ from DVL, Psychiatry & Respiratory Medicine) may be used for the ease of evaluation.

Format / Skeleton of question paper 5th internal assessment

Theory Examinations (III MBBS Part II)

SECTION "A" MCQ

Instructions:

9) *Put ☒ in the appropriate box below the question number once only.*
10) *Use blue ball point pen only.*
11) *Each question carries **one mark.***
12) *Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.*

SECTION "A" MCQ (20Marks)

1. Multiple Choice Questions (Total-20 MCQ) (1 x20=20)

a) b) c) d) e) f) g) h) i) j)

k) l) m) n) o) p) q) r) s) t)

SECTION "B" & "C"

Instructions:

1) ***Use blue/black ball point pen only.***
2) ***Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.***
3) ***All questions are compulsory.***
4) ***The number to the right indicates full marks.***
5) ***Draw diagrams wherever necessary.***

SECTION "B" (60Marks)

2 . Long Answer Questions (Any 2 out of 3) (Structured Case Based) (General Medicine) (2x15=30)

a) b) c)

3.Short Answer Questions (Any 2 out of 3) (Any one should be Clinical reasoning), 1 from AETCOM (General Medicine) (2x5=10)

a) b) c)

4.Short Answer Questions (Any 4 out of 5) (General Medicine) (4 x 5 =20)

a) b) c) d) e)

SECTION "C" –Allied (20Marks)

***5.* Short Answer Questions (allied DVL, Psychiatry & Respiratory Medicine) (4 x 5=20)**

a) b) c) d)

Separate answer sheets for question 4 (SAQ from DVL, Psychiatry & Respiratory Medicine) may be used for the ease of evaluation.

Format / Skeleton of question paper for University Theory Examinations (III MBBS Part II) Paper – I

(Subject names to be removed)

SECTION "A" MCQ

Instructions:

13) Put ☒ in the appropriate box below the question number once only.
14) Use blue ball point pen only.
*15) Each question carries **One mark.***
16) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.

SECTION "A" MCQ (20Marks)

1. Multiple Choice Questions (Total-20MCQ of One mark each) – (General Medicine) (1 x20=20)

a) b) c) d) e) f) g) h) i) j)

k) l) m) n) o) p) q) r) s) t)

SECTION "B" & "C"

Instructions:

1) Use blue/black ball point pen only.
2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
3) All questions are compulsory.
4) The number to the right indicates full marks.
5) Draw diagrams wherever necessary.

SECTION "B"

2 . Long Answer Questions (Structured Case Based) (General Medicine) (2x15=30)

a) b)

3.Short Answer Questions (Any one should be Clinical reasoning, 1 from AETCOM) (General Medicine) (3x5=15)

a) b) c)

SECTION "C"

4. Long Answer Question (Structured Case Based) (General Medicine) (1 x15=15)

a)

3.Short Answer Questions (General Medicine) (Any 4 out of 5) (4 x5=20)

a) b) c) d) e)

Format / Skeleton of question paper for University Theory Examinations (III MBBS Part II) Paper II

(Subject names to be removed)

SECTION "A" MCQ

Instructions:

17) Put ☒ in the appropriate box below the question number once only.
18) Use blue ball point pen only.
*19) Each question carries **One mark.***
20) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.

SECTION "A" MCQ (20Marks)

1. Multiple Choice Questions (Total-20MCQ of One mark each - 15 General Medicine , 2 DVL, 2 Respiratory Medicine, 1 Psychiatry) **(1 x20=20)**

a) b) c) d) e) f) g) h) i) j)

k) l) m) n) o) p) q) r) s) t)

SECTION "B" & "C"

Instructions:

1) Use blue/black ball point pen only.
2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
3) All questions are compulsory.
4) The number to the right indicates full marks.
5) Draw diagrams wherever necessary.

SECTION "B"

2 . Long Answer Questions (Structured Case Based) (General Medicine) **(2x15=30)**

a) b)

SECTION "C"

3.Short Answer Questions (any 4 out of 5) (DVL) **(4x5=20)**

a) b) c) d) e)

4.Short Answer Questions (Any 3 out of 4) (Psychiatry) **(3 x5=15)**

a) b) c) d)

5.Short Answer Questions (Any 3 out of 4) (Respiratory Medicine) **(3 x5=15)**

a) b) c) d)