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. <u>Remedial measures</u>

A. <u>Remedial measures for non-eligible students</u>

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)

Instructions:

SECTION "A" MCQ

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)

Indian Medical Graduate Training Programme The undergraduate medical education programme is designed with a goal to create an “Indian Medical Graduate” (IMG) possessing requisite knowledge, skills, attitudes, values and responsiveness, so that she or he may function appropriately and effectively as a physician of first contact of the community while being globally relevant.

COMPETENCY BASED CURRICULUM OF THE INDIAN MEDICAL GRADUATE PROGRAMME Specific Competencies- 1. Preamble 2. Integration 3. Pre-clinical Subjects 4. Second Professional (Para-Clinical) 5. Third Professional (Part I). 6. Third Professional (Part II).

Institutional Goals of Indian Medical Graduate Training Programme:-(Ref. THE GAZETTE OF INDIA : EXTRAORDINARY [PART III—SEC. 4]).

(1) In consonance with the national goals each medical institution should evolve institutional goals to define the kind of trained manpower (or professionals) they intend to produce. The Indian Medical Graduates coming out of a medical institute should: **(a)** be competent in diagnosis and management of common health problems of the individual and the community, commensurate with his/her position as a member of the health team at the primary, secondary or tertiary levels, using his/her clinical skills based on history, physical examination and relevant investigations. **(b)** be competent to practice preventive, promotive, curative, palliative and rehabilitative medicine in respect to the commonly encountered health problems. **(c)** appreciate rationale for different therapeutic modalities; be familiar with the administration of “essential medicines” and their common adverse effects. **(d)** be able to appreciate the socio-psychological, cultural, economic and environmental factors affecting health and develop humane attitude towards the patients in discharging one's professional responsibilities. **(e)** possess the attitude for continued self learning and to seek further expertise or to pursue research in any chosen area of medicine, action research and documentation skills.

(f) be familiar with the basic factors which are essential for the implementation of the National Health Programmes including practical aspects of the following: **(i)** Family Welfare and Maternal and Child Health (MCH) **(ii)** Sanitation and water supply **(iii)** Prevention and control of communicable and non-communicable diseases **(iv)** Immunization **(v)** Health Education **(vi)** Indian Public Health Standards (IPHS), at various levels of service delivery **(vii)** Bio-medical waste disposal **(viii)** Organizational and/or institutional arrangements.

(g) acquire basic management skills in the area of human resources, materials and resource management related to health care delivery, hospital management, inventory skills and

counseling. **(h)** be able to identify community health problems and learn to work to resolve these by designing, instituting corrective steps and evaluating outcome of such measures**. (i)** be able to work as a leading partner in health care teams and acquire proficiency in communication skills. **(j)** be competent to work in a variety of health care settings. **(k)** have personal characteristics and attitudes required for professional life such as personal integrity, sense of responsibility and dependability and ability to relate to or show concern for other individuals.

(2) All efforts must be made to equip the medical graduate to acquire the skills as detailed in Table 11 Certifiable procedural skills – A Comprehensive list of skills recommended as desirable for Bachelor of Medicine and Bachelor of Surgery (MBBS) – Indian Medical Graduate.

Table 9: Learner - Doctor programme (Clinical Clerkship)

Year of Curriculum	Focus of Learner - Doctor programme
Year 1	Introduction to hospital environment, early clinical exposure, understanding perspectives of illness
Year 2	History taking, physical examination, assessment of change in clinical status, communication and patient education
Year 3	All of the above and choice of investigations, basic procedures and continuity of care
Year 4	All of the above and decision making, management and outcomes

Table 5: Second Professional teaching hours

Subjects	Lectures (hours)	Small group learning (Tutorials / Seminars) /Integrated learning (hours)	Clinical Postings (hours) *	Self - Directed Learning (hours)	Total (hours)
Pathology	80	138	-	12	230
Pharmacology	80	138	-	12	230
Microbiology	70	110	-	10	190
Community Medicine	20	30	-	10	60
Forensic Medicine and Toxicology	15	30	-	5	50
Clinical Subjects	75**	-	540***		615
Attitude, Ethics & Communication Module (AETCOM)		29	-	8	37
Sports and extracurricular activities	-	-	-	28	28
Total	-	-	-	-	1440

* At least 3 hours of clinical instruction each week must be allotted to training in clinical and procedural skill laboratories. Hours may be distributed weekly or as a block in each posting based on institutional logistics.

** 25 hours each for Medicine, Surgery and Gynecology & Obstetrics.

***The clinical postings in the second professional shall be 15 hours per week (3 hrs per day from Monday to Friday).

Table 1: Time distribution of MBBS Programme & Examination Schedule

<table>
<tr><th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th><th>Jun</th><th>Jul</th><th>Aug</th><th>Sep</th><th>Oct</th><th>Nov</th><th>Dec</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Foundation Course</td><td colspan="4">I MBBS</td></tr>
<tr><td colspan="8">I MBBS</td><td>Exam I MBBS</td><td colspan="3">II MBBS</td></tr>
<tr><td colspan="8">II MBBS</td><td>Exam II MBBS</td><td colspan="3">III MBBS</td></tr>
<tr><td colspan="9">III MBBS Part I</td><td>Exam III MBBS Part I</td><td>Electives & Skills</td></tr>
<tr><td colspan="11">III MBBS Part II</td></tr>
<tr><td>Exam III MBBS Part II</td><td colspan="10">Internship</td></tr>
<tr><td colspan="2">Internship</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

- One month is provided at the end of every professional year for completion of examination and declaration of results.

Table 8: Clinical postings

Subjects	Period of training in weeks			Total weeks
	II MBBS	III MBBS Part I	III MBBS Part II	
Electives	-	-	8* (4 regular clinical posting)	4
General Medicine[1]	4	4	8+4	20
General Surgery	4	4	8+4	20
Obstetrics &Gynaecology[2]	4	4	8 +4	20
Pediatrics	2	4	4	10
Community Medicine	4	6	-	10
Orthopedics - including Trauma[3]	2	4	2	8
Otorhinolaryngology	4	4	-	8
Ophthalmology	4	4	-	8
Respiratory Medicine	2	-	-	2
Psychiatry	2	2	-	4
Radiodiagnosis[4]	2	-	-	2
Dermatology, Venereology & Leprosy	2	2	2	6
Dentistry & Anesthesia	-	2	-	2
Casualty	-	2	-	2
	36	42	48	126

* In four of the eight weeks of electives, regular clinical postings shall be accommodated.

Clinical postings may be adjusted within the time framework.

[1] This posting includes Laboratory Medicine (Para-clinical) & Infectious Diseases (Phase III Part I).

[2] This includes maternity training and family welfare (including Family Planning).

[3] This posting includes Physical Medicine and Rehabilitation.

[4] This posting includes Radiotherapy, wherever available.

Table 2: Distribution of subjects by Professional Phase

Phase & year of MBBS training	Subjects & New Teaching Elements	Duration#	University examination
First Professional MBBS	• Foundation Course (1 month) • Human Anatomy, Physiology & Biochemistry, introduction to Community Medicine, Humanities • Early Clinical Exposure	1 + 13 months	I Professional
	• Attitude, Ethics, and Communication Module (AETCOM)		
Second Professional MBBS	• Pathology, Microbiology, Pharmacology, Forensic Medicine and Toxicology, • Introduction to clinical subjects including Community Medicine • Clinical postings • Attitude, Ethics & Communication Module (AETCOM)	12 months	II Professional
Third Professional MBBS Part I	• General Medicine, General Surgery, Obstetrics & Gynecology, Pediatrics, Orthopedics, Dermatology, Psychiatry, Otorhinolaryngology, Ophthalmology, Community Medicine, Forensic Medicine and Toxicology, Respiratory medicine, Radiodiagnosis & Radiotherapy, Anesthesiology • Clinical subjects /postings • Attitude, Ethics & Communication Module (AETCOM)	13 months	III Professional (Part I)
Electives	• Electives, Skills and assessment*	2 months	
Third Professional MBBS Part II	• General Medicine, Pediatrics, General Surgery, Orthopedics, Obstetrics and Gynecology including Family welfare and allied specialties • Clinical postings/subjects • Attitude, Ethics & Communication Module (AETCOM)	13 months	III Professional (Part II)

*Assessment of electives shall be included in Internal Assessment.

Table 6: Third Professional Part I teaching hours

Subjects	Teaching Hours	Tutorials/ Seminars /Integrated Teaching (hours)	Self- Directed Learning (hours)	Total (hours)
General Medicine	25	35	5	65
General Surgery	25	35	5	65
Obstetrics and Gynecology	25	35	5	65
Pediatrics	20	30	5	55
Orthopaedics	15	20	5	40
Forensic Medicine and Toxicology	25	45	5	75
Community Medicine	40	60	5	105
Dermatology	20	5	5	30
Psychiatry	25	10	5	40
Respiratory Medicine	10	8	2	20
Otorhinolaryngology	25	40	5	70
Ophthalmology	30	60	10	100
Radiodiagnosis and Radiotherapy	10	8	2	20
Anesthesiology	8	10	2	20
Clinical Postings*	-	-	-	756
Attitude, Ethics & Communication Module (AETCOM)		19	06	25
Total	303	401	66	1551

** The clinical postings in the third professional part I shall be 18 hours per week (3 hrs per day from Monday to Saturday).*

Table 7: Third Professional Part II teaching hours

Subjects	Teaching Hours	Tutorials/Seminars / Integrated Teaching (hours)	Self - Directed Learning (hours)	Total* (hours)
General Medicine	70	125	15	210
General Surgery	70	125	15	210
Obstetrics and Gynecology	70	125	15	210
Pediatrics	20	35	10	65
Orthopaedics	20	25	5	50
Clinical Postings**				792
Attitude, Ethics & Communication Module (AETCOM)***	28		16	43
Electives				200
Total	250	435	60	1780

* 25% of allotted time of third professional shall be utilized for integrated learning with pre- and para- clinical subjects and shall be assessed during the clinical subjects examination. This allotted time will be utilized as integrated teaching by para-clinical subjects with clinical subjects (as Clinical Pathology, Clinical Pharmacology and Clinical Microbiology).

Distribution of Marks – Total 10 Marks

Sr. No.	Parameter		Marks	Phase
1	Drugs	5 Drugs	1	II (Second year)
		5 Drugs	1	III Part I (Third year)
		5 Drugs	1	III Part II (Fourth year)
2	Cases	CVS case-4	1	III Part I (Third year)
		RS Case-4	1	III Part I (Third year)
		Abdomen case-4	1	III Part I (Third year)
		Neurology case-4	1	III Part II (Fourth year)
3	Emergencies	2 Emergencies	1	II (Second year)
		5 Emergencies	1	III Part I (Third year)
		5 Emergencies	1	III Part II (Fourth year)
	Total-		**10**	

Drugs

Name of Drug-

Class/ Group of Drug-

Mechanism of action-

Dose of drug-

Paste picture of drug here

Indications-

Contraindications-

Adverse effects-

List the emergencies in which this drug is used

Pages 1 to 10 for 10 Drugs

Cases

Respiratory system case Proforma

History

I. *Cardinal symptoms:*Breathlessness, Cough,Expectoration,Hemoptysis,, Wheeze,Chest pain.

II. *History of tuberculosis:* Evening rise of temperature, night sweats, Anorexia and weight loss,Hemoptysis, Pleurisy, meningitis, lymphadenitis in pastor in family, TB contact.

III. *History of Mediastinal compression:* Dysphagia, Hoarse voice, Dyspnea and dry cough, Swelling over face

IV. *Habits:* Alcohol, smoking, tobacco or gutkachewing

V. *Aspiration:* Foreign bodies, vomitus.

VI. *For Industrial diseases:* Occupation, residencenear factories or mills

VII. *Allergy:*. Family history of asthma, hay fever, eczema, Rhinitis and Sinusitis: Nasal discharge, painand tenderness over sinuses, headache,recurrent cold

VIII. *Past history:*. Measles, influenza or whooping cough inchildhood (If bronchiectasis), Diabetes

IX. Past history of admissions in the hospital/ consultation with a doctor

X. Drug history-H/O medication patient is taking or has received in the past

General Examination

I. Built and nutrition

II. Nails and conjunctiva: Pallor, dubbing, cyanosis,icterus

III. lymphadenopathy (especially scalene nodeand cervical nodes), edema of feet, JVP

IV. TPR, BP

V. Spine

VI. *Stigma of tuberculosis:*Phlyctenular conjunctivitis, Scars and sinuses in neck or bones, Thickened spermatic cord, Erythema nodosum, Skin: Cutis vulgaris, scrofuloderma etc.

VII. *Neck:* Thyroid swelling. Tracheal tug

VIII. *Homer's syndrome:* Ptosis, miosis, anhydrosis,enophthalmos and absent ciliospinal reflex

IX. *Upper respiratory tract:* Sinus tenderness, Throat and tonsils, Posterior pharyngeal wall for posterior nasal drip, Alae nasi.

X. Gums and teeth. Exposure to TB, STD, HIV

Respiratory System Examination

I. Inspection:

A. Shape of chest

1. AP and transverse diameters: Barrelshaped chest, etc.
2. Hollowing, bulging, flattening orretraction
3. Sub-costal angle
4. Shoulders
5. Spine
6. Spinoscapular distance on both sides

B. Respiratory Movements

1. Respiratory rate
2. Rhythm
3. Character - Abdominal, thoracic, thoraco-abdominal or abdominothoracic
4. Equality
5. Accessory muscles of respiration
6. Inter-costal retractionI fullness

C. Mediastinum

1. Trailes sign
2. Apex impulse

D. Miscellaneous

1. **I.** Scars, sinuses

2. Pulsations
3. Dilated veins
4. Shinyskinoverlowerchest (Empyema,hepatic amebiasis)

II. Palpation

A. Findings ofinspection confirmed including

Chest Movements

B. Mediastinum

1. **I.** Trachea
2. Apexbeat

C. TACTILE VOCAL FREMITUS: TVF

D. Miscellaneous

Tenderness over lower inter costal spaces.

Other vibrations: Palpable rates, rhonchi,

Rub

Ill. Percussion:

A. Anteriorly

Rig/rt Side Left Side

1. Kronig's isthmus Kronig's isthmus.
2. Clavicular percussion Clavicular percussion
3. Intercostal resonance Intercostal resonance
4. Liver dullness Cardiac dullness
5. Tidal percussion Traube's area
6. Shifting dullness Shifting dullness
7. Percussion myokymia Percussion myokymia
8. Skodaic resonance

B. Posteriorly

1. Supra-scapular
2. Inter-scapular
3. Infra-scapular

C. In Axilla

1. Axillary
2. Infra axillary

IV. Auscultation:

A. ***Breath Sounds***

1. Normal or Diminished
2. Type: Vesicular, bronchial or vesicular

with prolonged expiration

B. Foreign Sounds: Rales, rhonchi or rub

C. Vocal Resonance

D. Miscellaneous

1. Bronchophony
2. Egophony
3. Whisperin g pectoriloquy
4. Succussion splash
5. Coin test
6. Post-tussive suction
7. Post-tussive rales

Differential/ Final Diagnosis

Anatomy (Where is the lesion?) e.g. Right upperlobe

Pathology (What is the lesion?) e.g. pneumonia

Etiology (What is the cause?) e.g. streptococci

Complications e.g. lung abscess

Risk factors e.g. smoking

Cardiovascular system case -Proforma

History

I. *Cardinal Symptoms*:Dyspnea on exertion or Breathlessness -including paroxysmal nocturnal dyspnea, orthopnea, platypnea and trepopnea, Chest Pain, Cough, Expectoration,Hemoptysis, Palpitation, Syncopal attacks

II. *Symptoms of Congestive Cardiac Failure (CCF)* Exertional breathlessness,Edema of feet, puffiness of face, anasarca,Distension of abdomen and pain inright hypochondrium, anorexia, nausea,vomiting

III. *Symptoms of Rheumatic Heart Disease (RHD)*Fever with sore throat,Fleeting joint pains and swelling, Involuntary movements (chorea), Nodules under the skin (rheumatic nodules)

IV. *Symptoms of Infective Endocarditis (SBE)*Pyrexia,Petechial hemorrhages,Pads of finger are tender (Osler nodes),Palpable spleen,Phalangeal dubbing,Prolonged treatment with high doses ofPenicillin,Hemoptysis, Hematuria, Hemiplegia,Phlebothrombosis

V. *Symptoms Suggesting Congenital Heart Disease*- Cyanotic spells,Squatting episodes

VI. *Pressure Symptoms* (Due to Enlarged Left Atriumor Aneurysm of Aorta)- Hoarseness of voice (pressure on therecurrent laryngeal nerve), Ortner'ssyndrome,Dysphagia (pressure on esophagus)

VII. *Miscellaneous*-

Family History: Hypertension, diabetes ,coronary artery disease, hyperlipidemia,congenital heart disease, cardiomyopathies

Past History of hypertension, diabetes ,coronary artery disease, hyperlipidemia,obesity, recurrent lower respiratoryinfection, tuberculosis, syphilis, STD, HIVinfection,

History of hospitalization Number of admissions, Duration of each admission, Investigations done e.g. ECG ,X-ray, Echocardiography, cardiaccatheterization, Diagnosis reached, if known; Drugs given e.g. diuretics, digitalis, Relief obtained or not, Advised surgery/intervention or not, *History of cardiac surgery, angioplasty or Valvuloplasty*

Physical Examination

General Examination

A. Build and nutrition
B. Nails and conjunctiva for pallor, icterus, dubbing, cyanosis.
C. Lymphadenopathy and thyroid swelling
D. Edema

E. Skin for petechial hemorrhages, Osler nodes,rheumatic nodules, xanthelasmas, xanthomas
F. Skeletal system - Kyphoscoliosis, polydactyly, cubitus valgus, etc.
G. TPR, BP
H. Features of Marfan's syndrome - tall, thin personwith long slender fingers, hyper-extensibility of joints, high arched palate, dislocation of lens

Peripheral

A. JVP - pressure and waves
B. Pulse - rate, rhythm, volume, character,equality, upstroke, downstroke, condition of vessel wall, apex pulse deficit and radiofemoral delay, carotid bruit.
C. Blood Pressure - both arms, supine andupright
D. Peripheral signs of wide pulse pressure asin AI, PDA, etc. e.g., pistol shot sounds over the femorals, Duroziez murmur, Corrigan'ssign, de Musset's sign, Quincke's sign,locomotor brachia!.

II. Central

A. Inspection:

1. l. Precordium
2. Apex impulse
3. Other pulsations - Parasternal, epi-gastric, suprasternal, in the neck, in the second left space and on right side
4. Dilated veins
5. 5.Scars, sinuses, etc.

B. Palpation:

1. Apex beat
2. Left parasternal heave
3. Diastolic shock (Palpable S2)
4. Thrills
5. Other pulsations

C. Percussion:

1. Left second and intercostal space dullness

2. Upper border
3. Right border
4. Left border
5. .Lower sternal resonance
6. Liver dullness and Stomach tympany for situs solitus or inversus

D. Auscultation:

1. Heart sounds
2. Murmurs - Systolic, diastolic or continuous.Other sounds e.g. pericardia! rub,opening snap, ejection clicks, etc.

Differential/ Final Diagnosis-

Central Nervous System Proforma

History

I. Name, Age, Sex, Occupation, Right or Lefthanded, Consanguinity

II. Motor symptoms

A. *Power:*

1. Upperlimbs:

a) Proximal: Lifting the arm abovethe head, eating.

b) Distal: Sewing, writing, buttoning,turning a key in a lock, etc.

2. Lower limbs:

a) Proximal: Climbing stair up anddown, squatting and getting upfrom squatting position.

b) Distal: Slippers falling from foot

c) Running, walking with or withoutsupport, standing with outsupport, moving limbs in thebed or complete paralysis.

Truncal : turning in bed.

B. *Nutrition:* Wasting of muscles (proximal

or distal), atrophy, hypertrophy.

C. *Coordination:*

1. Unsteadiness (For cerebellar ataxia).

2. Difficulty in feeling the ground andunsteadiness increasing in the dark.(For sensory ataxia).

3. Difficulty in reaching the target.

D. *Involuntary movements:*Chorea, athetosis, tremors, dystonia, hemiballismus flexor spasms, fasciculations, titubation.

III. Sensory symptoms

A. Tingling, numbness, root pains

B. Feeling hot and cold water during a bath

C. Feeling the ground well or ground feels likecotton wool.

IV. Sphincter disturbances

A.*Bladder:*

1. Feeling the sensation of bladderfullness

2. Initiation of micturition immediatelywhen desired

3. Control of micturition, once the desireto micturate has occurred

4. Complete evacuation of the bladderor a feeling of residual urine

5. Inability to pass urine at all

6. History of catheterization

B.*Bowel:* Constipation / Loose Stools

C.*Impotency:* In males

Cranial nerves

A. *Sensation of smell* **- 1st CN**

B. *Vision* **- acuity and color - 2nd CN**

C. *Diplopia, squint* **- 3rd, 4th, 6th CN**

D. *Sensations* **(Tingling, numbness over the**

face, and difficulty in chewing) - 5th CN

E. *Facial asymmetry, dribbling of saliva fromthe angle of the mouth, stasis off ood in themouth-* **7th CN**

F. *Vertigo, tinnitus, deafness* **- 8th CN**

G. *Hoarse voice, nasal twang, nasalregurgitatiotldysphagia* **- 10th + 9th CN**

H. *Dysarthria* **- 12th CN**

Abdomen case proforma

History

I. Anorexia, nausea, vomiting, dysphagia,flatulence, eructation, retrosternal burning, water brash

II. Diarrhea, constipation, clay stools, worms instools, mucus and blood in stools

III. Abdominal pain, lump, and distension

IV. Hematemesis, melena, bleeding per rectum

V. Jaundice, gynecomastia, loss of libido, loss of hair (for liver cell failure), reversal of normal sleep cycle.

VI. Fever, weight Joss

VII. Alcohol, smoking

VIII. Past history of tuberculosis, malaria, kala-azar, leukemia, hemolytic crisis (sudden pallor and dyspnea) sexual contact, drugs.

General Examination

I. Vital signs - TPR, BP

II. Built and nutrition, BMI (body mass index)

III. Pallor, Clubbing, Nails (chalky-white nails koilonycnia) cyanosis, icterus.

IV. Edema feet, lymphadenopathy, JVP

V. Signs of liver cell failure: Scanty hair, palmar erythema, spider nevi, parotid swelling,gynecomastia, testicular atrophy, Dupuytren'scontractures, flaps (asterixis), paper money skin.

VI. Stigma of tuberculosis: Scars and sinuses in neck,lymphadenopathy, phlyctenular conjunctivitis, thickened spermatic cord, chest signs, etc.

VII. Skin extoriations, ecchymosis or petechiae,cutaneous markers of GI malignancy.

VIII. Eye :Kayser - Fleischer ring on slit lamp

Examination of cornea.

IX. Miscellaneous: Bony tenderness, genitals.

Alimentary System Examination

I. Oral cavity, Teeth,Tongue, Tonsils, Oropharynx

II. Abdomen:

A. Inspection:Skin,Shape of abdomen,Umbilicus,Abdominal movements,Pulsations,Dilated veins,Peristalsis, Scars and sinuses,Hernial orifices.

B. Palpation:

I. Tenderness, guarding and rigidity onsuperficial palpation.

2. Liver, spleen, kidney, gall bladder,colon, or any other lump (Its size,surface, borders, tenderness and

bruit}

3. Fluid thrill

C. Percussion:

I. Horseshoe and shifting dullness.

2. Dullness over any lump, if palpable.

3. Renal angle tenderness (i.e. anglebetween one 12th rib & outer borderof erector spinae) seen in perinephricabscess.

D. Auscultation:

1.Peristalsis2. Rub3. Arterial Bruit or venous hum4. Puddles sign

E. Miscellaneous:

1.Abdominal girth2. PR examination3. Proctoscopy

Emergencies-

1. Basic Life support and Advanced cardiac Life support (BLS & ACLS)
2. Organophosphorous poisoning/ Paraquate poisoning
3. Snake bite
4. Anaphylactic shock
5. Acute myocardial infarction
6. Acute Complications of Acute myocardial infarctions
7. Upper GI Bleed/ Hematemesis
8. Hypertensive emergencies
9. Shock
10. Pulmonary embolism
11. Acute respiratory failure
12. Acute renal failure
13. Status asthamaticus
14. Severe hypokalemia
15. Severe hyperkalemia
16. Status epilepticus
17. Hepatic encephalopathy
18. Diabetic ketoacidosis
19. Hyperosmolar Coma
20. Severe hypoglycaemia

Maharashtra University of Health Sciences

PHASE II to Phase IV MBBS

COMPETENCY BASED CURRICULUM-2019 batch

GENERAL MEDICINE LOG BOOK

NAME OF COLLEGE-

NAME OF STUDENT-

ROLL NUMBER- **BATCH – A/B/C/D/E/F**

CONTENTS

PERSONAL DETAILS

Name of student-

Mobile Number-

Residential Address-

Photo stick here

Father/Guardians contact no.

Email-

Email of Father/Guardian-

Date of admission to MBBS course-

Date of beginning of current phase-

LOGBOOK CERTIFICATE (General Medicine)

This is to certify that the candidate Mr/ Ms ……, Reg No....., admitted in the year 2019-20 in the ---------- Medical College,---------- has satisfactorily completed / has not completed all assignments /requirements mentioned in this logbook for Second to fourth year MBBS course in the subject(s) of General Medicine Foundation Course/ AETCOM during the period from …… to…… . She / He is / Eligible/ not eligible to appear for the summative (University) assessment as on the date given below.

Signature of all Unit In charges-

Signature of Head of the Department

Principal/Dean of the College

Place:
Date:

GENERAL INSTRUCTIONS

1. The logbook is a record of the academic / co-curricular activities of the designated student, who would be responsible for maintaining his/her logbook.
2. The log book is a record of the academic / nonacademic activities of the student. Each Medical student is responsible for maintaining their logbook.
3. This logbook is prepared as per the guidelines of MCI for implementation of Competency based curriculum for Phase II to Phase IV Professional MBBS students in the subject of General Medicine.
4. Students are instructed to keep their logbook entries up to date. It is the responsibility of the student to enter their activity in respective pages & get them duly singed by the supervising faculty.
5. Entries in the logbook will be in accordance with activities done in the departments and has to be scrutinized by the Head of all the concerned departments.
6. The logbook shall be kept as record work of the candidate for that department / specialty & be submitted to department as a bonafide record of the candidate before appearing for the University examination.

NOTE:

1. A clear record of all components that add to the internal assessment marks needs to be maintained by the institution and retained by them for at least 5 years after completion of the examination. Institutions may be asked to provide these details by the University as and when required.

2. The contents in the log book are suggested guidelines. The institutions can make necessary changes as per the needs.

3. The student is responsible for getting the entries in the logbook verified by the Faculty in charge regularly.

4. Entries in the logbook will reflect the activities undertaken in the department & have to be scrutinized by the Head of the concerned department.

5. The logbook is a record of various activities by the student like:- Overall participation & performance, Attendance, Participation in sessions, Record of completion of pre-determined activities., Acquisition of selected competencies.

Record of Attendance for Theory and clinical postings

	Duration	Practical		Theory		Signature of Unit in charge/ HOD
		No of days	Days attended	No of days	Days attended	
Phase II						
First clinical posting	4 weeks					
Second clinical posting	4 weeks					
Phase III Part I	8 weeks					
Phase III Part I	4 weeks					

Dates of completion of clinical postings

Phase	From	To	Absent days	Journal completed	Signature of unit in charges with name and dates
II					
III Part I					
III Part II					

SCHEME OF EXAMINATION - Internal Assessment

Sr. No.	Internal assessment	Date/Month /Year	Marks obtained		Out of 4.5	Signature of student
			Theory out of	Practical out of		
1	First	September				
2	Second	September				
3	Third Part I	October				
4	Third Part II	January				
	Total					
	Round up-					

Duration and details of course

Sr. No.	Phases		Semester	No of Months
1	I	First professional Preclinical phase	Semester 1 & Semester 2	1 + 12 months
2	II	Second professional Paraclinical Phase	Semester 3 & Semester 4	11 Months
3	III Part I	Third professional Clinical Phase	Semester 5 & Semester 6	13 Months
4	Electives, skills and assessment			2 Months
5	III Part II	Third professional Clinical Phase	Semester 7, Semester 8 Semester 9	13 Months

Phase	Hours	Total hrs
First I		
Early clinical exposure	90	
Second II		
Lectures	75	615 hrs
Tutorial/Seminars/Integrated learning	--	-
Self directed learning	--	--
Third Part I		
Lectures	25	65 hrs
Tutorial/Seminars/Integrated learning	35	
Self directed learning	5	
Third Part II		
Lectures	70	210 hrs
Tutorial/Seminars/Integrated learning	125	
Self directed learning	15	

Theory teaching

Learner – Doctor Programme (Clinical clerkship) (Reference- The Gazette of India: Part III-sec.4 pg 74-74)

The learner will function as a part of the health care team with the following responsibilities:

(i) Be part of the unit's outpatient services on admission days,
(ii) Remain with the admission unit until 6 PM except during designated class hours,
(iii) Be assigned patients admitted during each admission day for whom he/she will undertake responsibility, under the supervision of a senior resident or faculty member,
(iv) Participate in the unit rounds on its admission day and will present the assigned patients to the supervising physician,
(v) Follow the patient's progress throughout the hospital stay until discharge,
(vi) Participate, under supervision, in procedures, surgeries, deliveries etc. of assigned patients (according to responsibilities outlined in table 9),
(vii) Participate in unit rounds on at least one other day of the week excluding the admission day,
(viii) Discuss ethical and other humanitarian issues during unit rounds,
(ix) Attend all scheduled classes and educational activities,
(x) Document his/her observations in a prescribed log book / case record.
(xi) No learner will be given independent charge of the patient.

Year of curriculum	Focus of Learner- Doctor programme
Year 1	Introduction to hospital environment, early clinical exposure, understanding perspectives of illness

Year 2	History taking, physical examination, assessment of change in clinical status, communication and patient education
Year 3	All of the above and choice of investigations, basic procedures and continuity of care
Year 4	All of the above and decision making, management and outcomes

Details of internal assessment

Internal Assessment Subject: General Medicine

Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onward

Phase	**I-Exam (At the end of first term)**			**II-Exam (At the end of second term)**		
	Theory	Practical (Including 10 Marks each for Journal & Log Book)	Total Marks	Theory	Practical (Including 10 Marks each for Journal & Log Book)	Total Marks
Second MBBS	50	50	100	50	50	100

Phase	**I-Exam (At the end of first term)**			**II-Exam (At the end of second term)**		
	Theory	Practical (Including 10 Marks each for Journal & Log Book	Total Marks	Theory	Practical (Including 10 Marks each for Journal & Log Book)	Total Marks
III/I MBBS	50	50	100	50	50	100

Phase	**I-Exam (at the end of first term)**			**II-Exam Preliminary examination**		
	Theory	Practical (Including 10 Marks each for Journal & Log Book)	Total Marks	Theory	Practical (Including 10 Marks each for Journal & Log Book)	Total Marks
III/II	50	50	100	200	200	400

MBBS				(100 x 2 papers)		

1. There will be 5 internal assessment examinations (2 each in 2nd MBBS and 3rd Part I and 1 in 3rd Part II MBBS) in the Subject of General Medicine and 1preliminary examination (3rd Part II MBBS). The structure of the internal assessment theory examinations should be similar to the structure of University examination.
2. It is mandatory for the students to appear for all the internal assessment Examinations in the respective phases. A student who has not taken minimum required number of tests for Internal Assessment each in theory and practical will not be eligible for University examinations.
3. There will be only one additional examination for absent students (due to genuine reason) after approval by the Institutional Grievances Committee. It should be taken after preliminary examination and before submission of internal assessment marks to the University.
4. Internal assessment marks for theory and practical will be converted to out of
5. 100. Internal assessment marks, after conversion, should be submitted to university within the stipulated time as per directives from the University.
6. Conversion Formula for calculation of marks in internal assessment examinations
7. Formula for Theory (out of 450) = Total marks/4.5 Formula for Practical (out of 450) = Total marks/4.5
8. While preparing Final Marks of Internal Assessment, the rounding-off marks shall done as illustrated in following table

Internal Assessment Marks	**Final rounded marks**
13.01 to 13.49	13
13.50 to 13.99	14

9. 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. Internal assessment marks will reflect as separate head of passing at the summative examination.
10. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.

11. Preliminary examination (3rd Part II MBBS). The structure of the internal assessment theory examinations should be similar to the structure of University examination.
12. It is mandatory for the students to appear for all the internal assessment Examinations in the respective phases. A student who has not taken minimum required number of tests for Internal Assessment each in theory and practical will not be eligible for University examinations.
13. There will be only one additional examination for absent students (due to genuine reason) after approval by the Institutional Grievances Committee. It should be taken after preliminary examination and before submission of internal assessment marks to the University.
14. Internal assessment marks for theory and practical will be converted to out of
15. 100. Internal assessment marks, after conversion, should be submitted to university within the stipulated time as per directives from the University.
16. Conversion Formula for calculation of marks in internal assessment examinations
17. Formula for Theory (out of 450) = Total marks/4.5 Formula for Practical (out of 450) = Total marks/4.5
18. While preparing Final Marks of Internal Assessment, the rounding-off marks shall done as illustrated in following table

Internal Assessment Marks	**Final rounded marks**
13.01 to 13.49	13
13.50 to 13.99	14

19. 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. Internal assessment marks will reflect as separate head of passing at the summative examination.
20. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.

Second MBBS Practical Mark's Structure

Internal Assessment Examinations

(Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onwards)

II MBBS- TERM-I

Seat No.	JOURNAL	LOG BOOK	OSCE-1	OSCE-2	OSCE-3	OSCE-4	CASE	Practical Total
Max. Marks	10	10	5	5	5	5	10	50

- **OSCE DETAILS: 1.** History taking of a particular symptom; **2**. Demonstration of signs- Pulse/BP/JVP; **3.** Identification of General Examination Finding; **4.** Communication Skills with Pt or Relative

II MBBS- TERM-II

Seat No.	JOURNAL	LOG BOOK	OSCE-1	OSCE-2	OSCE-3	OSCE-4	CASE	Practical Total
Max. Marks	10	10	5	5	5	5	10	50

OSCE DETAILS: 1. Demonstration of Syst Exam signs; **2.** Spot Diagnosis - Jaundice, Clubbing, LN etc; **3**. Drugs Indication/Contraindication/ Adverse Effects Etc; **4.** Equipment – Name / Indication/ Contraindications

Paper wise distribution of topics for Internal assessment
Year: Second MBBS
Subject: GENERAL MEDICINE

Internal Assessment	**Section**	**Topics**
I (50 marks)	**Section A** MCQs on all topics (15x1=15 marks) **Section B** SAQ on all topics (4x5=20) **Section C** LAQ on all topics (15x1=15 marks)	Fever & Febrile Syndromes
		HIV
		Diarrhoeal Diseases
		Envenomation
II (50 marks)	**Section A** MCQs on all topics (15x1=15 marks) **Section B** SAQ on all topics (4x5=20) **Section C** LAQ on all topics (15x1=15 marks)	Pneumonia
		Miscellaneous Infections
		Poisoning
		Nutrition & Vitamin Deficiencies

Year: III-I MBBS Subject: GENERAL MEDICINE

Internal Assessment	Section	Topics
I (50 marks)	**Section A** MCQs on all topics (15x1=15 marks)	Hypertension
		Heart failure
	Section B SAQ on all topics (4x5=20)	
		Acute MI/IHD
	Section C LAQ on all topics (15x1=15 marks)	The role of physician in the community
		AET-COM

Paper wise distribution of topics for Prelim & MUHS Annual Examination

Subject: General Medicine

Paper	Section	Topics
I (100 marks)	**Section A** MCQs on all topics of the paper I (20x1=20)	Fever & Febrile Syndromes
		HIV
		Diarrhoeal Diseases
		Pneumonia
		Envenomation
	Section B SAQ on all topics of the paper I (7x5=35)	Miscellaneous Infections
		Poisoning
		Nutrition & Vitamin Deficiencies
		Anaemia
	Section C LAQ on all topics of the paper I (3x15=45)	Obesity
		Hypertension
		Heart failure
		Acute MI/IHD
		The role of physician in the community
		AET-COM
II (100 marks)	**Section A** MCQs on all topics of the paper II (20x1=20)	GI Bleed
		Liver Diseases
		Mineral Fluid Electrolyte and acid base disorder
		Acute kidney injury and chronic renal failure
		Headache
	Section B SAQ on all topics of the paper II (7x5=35)	Cerebrovascular accident
		Movement disorder
		Diabetes
		Thyroid Dysfunction
		Rheumatological Problems
	Section C LAQ on all topics of the paper II (3x15=45)	Common Malignancies
		Geriatrics
		Psychiatry, Dermatology & Leprosy (DVL) and Respiratory Medicine including Tuberculosis
		AET – COM

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NAS

FORMAT / SKELETON OF QUESTION PAPE

1. Course and Year	: **Second/ III-I/ III-II MBBS** *(applicable w.e.f. August 2021 & onwards examinations)*						2. Subject Code	
3. Subject (PSP)	:							
(TT)	:							
4. Paper :	: ***I/II***	5. Total Marks	: _____	6. Total Time	: **3 Hrs.**			
7. Web Pattern	: [ ]	8. Web Skeleton	: [ ]	9. Web Syllabus	: [ ]		10. Web Old QP	

Instructions:

SECTION "A" MCQ

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 o marked.*

SECTION "A" MCQ (_____Marks)

1. Multiple Choice Questions (Total _____ MCQ of One mark each)

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 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.*
6) *Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipu paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any ques claim that the Question is out of syllabus. As It is only for the placement sake, the distribution has*
7) *Use a common answerbook for all sections.*

SECTION "B" (_____ Marks)

2 Short Answer Questions (Any _____out of _____)

a) b) c) d) e)

3 Long Answer Questions (Any ____ out of _____)

a) b) c)

SECTION "C" (_____Marks)

4. Short answer questions (Any _____ out of _____)

a) b) c) d) e)

5. Long Answer Questions (Any _____out of _____)

a) b) c)

Assessment of Skill competencies

Assessment of DOAP Sessions

Phase	Competency Nos.	Topics & Subtopics	Teaching & Learning method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
Phase II	1.12	Pulse examination with demonstration				
	1.13	Measure BP accurately				
	1.14	JVP				
	4.10	Examination of skin, lymph node, chest and abdominal examination				
	2.7	CVS Examination with demonstration				
	3.4 & 3.5	Orientation to history taking, general examination & systemic examination of Respiratory system				
Phase III part II (fourth year)	IM 3.9/ IM 5.15	Demonstrate in a mannequin and interpret results of a pleural fluid Aspiration				
	IM5.15	Assist in the performance and interpret the findings of an ascitic fluid analysis	Mannequins/bedside clinic/Real patient			
	M6.15/ M 17.8 17.9	Demonstrate in a model the correct technique to perform a lumbar Puncture	Mannequins/bedside clinic/ Real patient			
Feedback by Faculty-						
Phase II						
Phase III Part I						
Phase III Part II						

Assessments of Skill acquisition Sessions

Phase	Competency Nos.	Topics & Subtopics	TL Method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
Phase II	1.30	Intramuscular injection	Simulator / Mannequin/Small group discussion			
		Ward round • Communication with patient • Patient Education				
Phase III **Part I**	IM4.15	Peripheral blood smear interpretation&Perform and interpret a malarial smear	Small group discussion			
		Ryles tube insertion	Simulation/ Real patient			
	IM4.20	Interpret a PPD (Mantoux)	Small group discussion			
	IM11.19	Demonstrate(and counsel) patients on the correct technique to administer insulin	Real patient			
	IM3.17	Describe and discuss the supportive therapy in patients with pneumonia including oxygen use and	Small group discussion			

		indications for ventilation (K)				
	IM11.13	Bedside urine analysisv&vPerform and interpret aurinary ketone estimation with a dipstick	Real patient			
	IM15.2 M15.11	Setting up IV infusion and calculating drip rate	Seminar/ Small group discussion /Casualty real patient			
Phase III part II (fourth year)	IM1.22	Assist and demonstrate the proper technique in collecting specimen for blood culture	Simulators/manneq uin			
	IM4.19	Assist in the collection of blood	Bed side clinics			
	IM11.12	Perform and interpret a capillary blood glucose test	Real patient			
	IM25.9	Assist in the collection of blood and other specimen cultures	Bed side clinic/real patients			
	IM9.19	Assist in a blood transfusion	Bed side clinic/real patients			
	IM15.13	Observe cross matching and blood / blood component transfusion	Bed side clinic/real patients			
	IM2.22	Perform and demonstrate in a mannequin BLS	DOAP			
	IM2.21	Observe and participate in a controlled environment an ACLS Program	Session in skills lab			
Feedback by Faculty						
Phase III Part I						

Phase III Part II	

Assessments of case presentation Sessions

Phase	Competency Nos.	Topics & Subtopics	TL Method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
Phase II	20.4 & 20.5	Medical emergency - snake bite – Elicit, present and document an detail history, Perform a systematic examination, document and present a local, appropriate cardiac and neurologic examination	Seminar/ Small Group discussion			
	CT2.20	Describe and discuss the principles and use of oxygen therapy in the hospital and at home	Lecture/ seminar/small group discussion /bedside clinic			
	CT2.22	Demonstrate and counsel patient on the correct use of inhaler	Small group discussion			
Phase III part II (fourth year)	IM10.21	Describe and discuss the indications for and insert a peripheral intravenous catheter	Seminar / lecture			
	IM11.20	Demonstrate to and counsel patients correct technique on the of self-monitoring of blood glucoses	Seminar/lecture			
	IM15.2	Enumerate, describe and discuss the evaluation and steps involved in	Seminar/lecture/smal			

		stabilizing a patient who presents with acute volume loss and GI Bleed	l group discussion			
	IM15.11	Develop, document and present a treatment plan that includes fluid resuscitation, blood and blood component transfusion, and specific therapy for arresting blood loss	Seminar/lecture/small group discussion			
	AS2.1	Enumerate the indications, describe the steps and demonstrate in a simulated environment basic life support in adults children and neonates	Seminar/lecture/small group discussion			
	IM17.9	Interpret the CSF findings when presented with various parameters of CSF fluid analysis	Seminar/lecture/small group discussion			
Feedback by Faculty						
Phase III Part I						
Phase III Part II						

Assessment of OSCE

Phase	Competency Nos.	Topics & Subtopics	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
Phase II	IM4.15 IM9.10	Perform and interpret a malarial smear Describe, perform and interpret a peripheral smear			
	IM11.13 BI11.4	Perform and interpret a urinary ketone estimation with a dipstick Perform urine analysis to estimate and determine			

		normal and abnormal constituents			
		Interprete Chest X Ray			
		Interprete blood culture			
		Interprete Hemogram- CBC etc			
		Interprete Liver function tests			
		Interprete CSF analysis			
		Interprete ascitic, pleural fluid			
		Interprete ABG			
Feedback by Faculty					
Phase III Part I					
Phase III Part II					

Skill acquisition Vertical integration

Phase	Competency Nos.	Topics & Subtopics	Teaching & Learning method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
Phase III	OG35.17	OBGY Demonstrate the correct technique of urinary catheterization in a simulated/ supervised environment	Small group discussion / real patient/ simulation			
	CT2.20	Chest Medicine – Describe and discuss the principles and use of oxygen therapy in the hospital and at home	Seminar/ Group discussion			
	CT2.22	Chest Medicine- Demonstrate and counsel patient on the correct use of inhalers	Small group discussion / Role play/ Real patient			
	AS2.1	Enumerate the indications,	DOAP			

		describe the steps and demonstrate in a simulated environment **basic life support in adults children and neonates**	Session in skills lab			
	AS2.2	Enumerate the indications, describe the steps and demonstrate in a simulated environment **advanced life support in adults and children**	DOAP Session in skills lab			
Feedback by Faculty						
Phase III Part I						
Phase III Part II						

Integrated teachings-

Phase	Subject	Hours	Competency Nos. Topics & Subtopics	Teaching & Learning method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
III Part I		**Total 9 hours (3 hours each for clinical Pharmacology, clinical Pathology and Clinical microbiology)**					
	Clinical Pharmacology	3hours	Clinical pharmacokinetics-1 hr Adverse drug reaction-1 hr Drug-Drug interaction-1 hr				
	Clinical Pathology	3hours	Anaemia and haemoglobinopathies-1 hr Hematological malignancies-1 hr Platelet disorder-1 hr				
	Clinical Microbiology	3hours	Pyrexia of unknown origin -1 hr Antimicrobial resistance -1 hr Viral haemorrhagic fever -1 hr				
III Part II		**Integrated teachings- Total 19 hours**					
	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				
	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				
	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				
	Geraiatrics	3 hours	Polypharmacy Falls Incontinence				
Feedback by Faculty							
Phase III Part I							
Phase III Part II							

AETCOM

75% Attendance is required for eligibility to appear for final examination in each professional year.

Maharashtra University of Health Sciences General Medicine Task Force for CBME Implementation			
Summary of AETCOM modules for Third and Fourth professional years			
	Third professional Year	**Fourth Professional Year**	Total
Number of Modules	5	9	14
Number of Hours for training	19	28	47
Number of Hours for SDL	06	16	22
Number of hours to be shown in time table of respective departments for AETCOM			
Hours of training by Medicine	10	15	25
Hours of training by Surgery	10	15	25
Hours of training by OBGY	05	09	14
Hours of training by Pediatrics	00	05	05

Assessment of AETCOM -

Phase	Competency Nos.	Topics & Subtopics	Teaching & Learning method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
II	26.20	Demonstrate ability to communicate to patients in a respectful, non threatening, non judgemental and empathetic manner	**Small group discussion/Role play**			
	26.21 & 26.22	- Demonstrate respect to patient privacy - Demonstrate ability to maintain confidentiality in patient care	**Lecture/ Small group discussion**			
	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	**Lecture/ self directed learning/Small group discussion**			
	26.35	Demonstrate empathy in patient encounters	**Role play/ Case presentation**			
III Part I	26.29 - 26.31	Role of Physician in Community- Communicate diagnostic and therapeutic options to patient and family in a simulated environment Communicate care options to patient and family with a terminal illness in a simulated environment Demonstrate awareness of limitations and seeks	Lecture/ Small group discussion/Role play			

		help and consultations appropriately				
Module 3.3		Administer informed consent and appropriately address patient queries to a patient undergoing a Surgical/ therapeutic procedure in a simulated environment	Small group discussion/ Real patient/ Role play			
Module 4.4		Communication, Attitude and Ethics **Empathy, Doctor Patient Relationship , Effective Communication in terminally ill**	CBL /video with interactive lecture, role play / small group session with standardized patient in soft skills lab.			
Module 4.5		Ethics and attitude **Doctor Industry relationship- Conflicts of interests in patients care and professional**	Role play/ CBL with interactive lecture			
Module 4.8		Communication, Attitude and Ethics **Empathy, Death declaration, Handling emotions during death, Euthanasia , Breaking Bad News effectively**	CBL /video with interactive lecture, role play / small group session with standardized patient as relative in soft skills lab.			
Phase III Part II						
Module 4.1		**Foundation of Communication 5 Effectively communicating Diagnosis, Prognosis and therapy (Counseling skills)**	**Small group teaching with soft skills lab session related to Counseling skills**			
Module 4.2		Ethics Abortion, MTP, Reproductive rights and ethical conflicts	CBL with interactive lecture (Can be a large class teaching)			

Module 4.9		Ethics Legal aspects of Care, Medical negligence and malpractices	CBL with interactive lecture/ small group discussions			
Feedback by Faculty						
Phase III Part I						
Phase III Part II						

Assessment of Tutorials

Phase	Topic	Hours	**Attempt at activity First (F) Repeat (R) Remedial (Re)**	**Decision of faculty Completed (C) Repeat (R) Remedial (Re)**	**Initial of faculty and date**
III Part I	Medical emergencies	1 hr			
	Valvular heart disease in adults	1 hr			
	Acynotic congenital heart disease in adults (ASD,VSD,PDA)	1 hr			
	Cynotic congenital heart disease in adults (TOF)	1 hr			
	Instruments- Video of procedures/Real/casewise	1 hr			
	Instruments	1 hr			
	X rays	1 hr			
	X rays	1 hr			
	ECG- Approach to basics of ECG	1 hr			
	ECG- How to read ECG?	1 hr			
III Part II	**ECG-**	10 Hours			
	How to interprete ECG?	1 hr			
	ECG-Diagnosing Myocardial infarctions	1 hr			
	ECG: Chamber enlargement	1 hr			
	ECG-Bundle branch blocks	1 hr			
	Electrolyte abnormalities on ECG	1 hr			
	Narrow Complex tacchyarrythmias	1 hr			

	Bradyarrthmias	1 hr			
	Valvular Heart diseases	1 hr			
	ECG Quiz	1 hr			
	Misceleneous	1 hr			
	Radiology-	**11 Hours**			
	Basics of Chest X Ray	1 hr			
	Reading Normal X Ray Chest	1 hr			
	Abnormalities on Chest X Ray – Cardiovascular system	1 hr			
	Pulmonary venous hypertension vs pulmonary arterial hypertension	1 hr			
	Chest X ray – Respiratory system	1 hr			
	Abdominal system(Chest & Abdomen X Ray)	1 hr			
	Miscelleneous X ray	1 hr			
	Basics of CT Scan	1 hr			
	Basics of MRI	2 hr			
	Basics of PET scan	1 hr			
	Drugs- Case based approach	**13 Hours**			
	Anti epileptics	1 hr			
	Cardiovascular Drugs	1 hr			
	Anti Tubercular Therapy	1 hr			
	Anti Retroviral Therapy	1 hr			
	Emergency Drugs	1 hr			
	Antiviral Drugs	1 hr			
	Drugs in respiratory system	1 hr			
	Glucocorticoids	1 hr			
	Drugs in Rheumatology	1 hr			
	Anticoagulants	1 hr			
	Inotropes and inodilators	1 hr			
	Anti hypertensives	1 hr			
	Antidiabetic drugs	1 hr			
	Interpretation of Lab Charts	**12 Hours**			
	Interpretation of Ascitic fluid analysis				
	Interpretation of Pleural fluid analysis				
	Interpretation of Cerebrospinal fluid analysis				

	Interpretation of Abnormal LFT				
	Interpretation of Anemia				
	Interpretation of thyroid function test				
	Interpretation of Peripheral blood smear				
	Interpretation of urine analysis				
	Interpretation of Fundus examination				
	Interpretation of renal function tests				
	Interpretation of Bone marrow studies				
	Interpretation of ABG				
Feedback by Faculty					
Phase III Part I					
Phase III Part II					

Assessment of Seminars

Phase	Topic	Hours	**Attempt at activity First (F) Repeat (R) Remedial (Re)**	**Decision of faculty Completed (C) Repeat (R) Remedial (Re)**	**Initial of faculty and date**
III Part I	**Seminars**	**16 Hours**			
	Clinical approach to Ascites				
	Clinical approach to Anaemia				
	Clinical approach to lymphadenopathy				
	Clinical approach to Jaundice				
	Clinical approach to chest pain				
	Clinical approach to headache				
	Clinical approach to bleeding diathesis				
	Clinical approach to Comatose patient				
	Portal hypertension and its complications				
	Pulmonary arterial hypertension				
	Pulmonary function tests				
	Thyroid function tests				
	Grave's disease				
	Micro-vascular complications of DM				
	Macro-vascular complications of DM				

	Insulin and analogues				
III Part II	Seminars	**45 hours**			
	Clinical approach to Hypertensive emergencies				
	Clinical approach to Acute myocardial infarction				
	Clinical approach to solitary Seizure				
	Clinical approach to ischemic stroke				
	Clinical approach to intracranial bleed				
	Clinical approach to Heart Failure				
	Clinical approach to Acute renal failure				
	Clinical approach to Chronic kidney disease				
	Clinical approach to hyponatremia				
	Clinical approach to potassium imbalance disorders				
	Clinical approach to disorders of calcium metabolism				
	Interpretation of ABG				
	Mixed Acid Base disorders				
	Emerging Viral Infections				
	Clinical approach to Geriatric Syndromes				
	Clinical approach to a case of Pulmonary Tuberculosis				
	Clinical approach to a case of Extra Pulmonary Tuberculosis				
	Clinical Approach to a case of PLHIV				
	Clinical approach to opportunistic infections in a case of PLHIV				
	Clinical approach to prescription of ART				
	Clinical approach to a case of Dengue				
	Clinical approach to a case of Complicated malaria				
	Recent advances in the diagnosis of tuberculosis				
	Vaccines for tuberculosis				
	Recent advances in anti retroviral drugs				
	Clinical approach to a case of Interstitial lung disease				
	Clinical approach to a case of snake bite				

	Clinical approach to a case of electric injury				
	Clinical approach to a case of acute meningitis				
	Clinical approach to a case of Chronic meningitis				
	Ageing				
	Human Microbiome				
	Clinical approach to oncological emergencies				
	Clinical approach to a case of Acute Leukemia				
	Clinical approach to a case of Chronic leukemia				
	Medicolegal, socioeconomic and ethical issues as it pertains to organ donation				
	Role of physician in community				
	Medicolegal, sociocultural, economic and ethical issues as it pertains to rights, equity and justice in access to health care				
	Medicolegal, socio-cultural and ethical issues as it pertains to confidentiality in patient care				
	Medicolegal, socio-cultural and ethical issues as it pertains to research in human subjects				
	Medicolegal, socio-cultural, professional and ethical issues as it pertains to the physician patient relationship (including fiduciary duty)				
	Documentation in health care (including correct use of medical records)				
	Use of information technology that permits appropriate patient care and continued learning				
	Understanding of the implications and the appropriate procedures and response to be followed in the event of medical errors				
	Conflicts of interest in patient care and professional				

	relationships and describe the correct response to these conflicts				
	Clinical approach to a case of DIC				
	Clinical approach to a case of arthritis				
	Clinical approach to a case of multisystem involvement				
	Clinical approach to a case of peripheral neuropathy				
	Clinical approach to a case of flaccid quadriparesis				
Feedback by Faculty					
Phase III Part I					
Phase III Part II					

Assessment of Theory Competencies

1	2	3	4	5	6	7	8
Competency # addressed	**Name of Activity**	**Date completed: dd-mm-yyyy**	**Attempt at activity** First or Only (F) Repeat (R) Remedial (Re)	**Rating** Below (B) expectations Meets (M) expectations Exceeds (E) expectations OR Numerical Score	**Decision of faculty** Completed (C) Repeat (R) Remedial (Re)	**Initial of faculty and date**	**Feedback Received** Initial of learner
Heart Failure							
IM1.10	Elicit, document and present an appropriate history that will establish the diagnosis, cause and severity of heart failure including presenting complaints, precipitating and exacerbating factors, risk factors						
IM1.11	Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and estimate its severity including: measurement of pulse, blood pressure and respiratory rate, jugular venous forms and pulses, peripheral pulses, conjunctiva and fundus, lung, cardiac examination including palpation and auscultation with identification of heart sounds and murmurs, abdominal distension and splenic palpation						
IM1.12	Demonstrate peripheral pulse, volume, character, quality and variation in various causes of heart failure						
IM1.13	Measure the blood pressure accurately, recognise and discuss alterations in blood						

	pressure in valvular heart disease and other causes of heart failure and cardiac tamponade						
IM1.14	Demonstrate and measure jugular venous distension						
IM1.15	Identify and describe the timing, pitch quality conduction and significance of precordial murmurs and their variations						
IM1.16	Generate a differential diagnosis based on the clinical presentation and prioritise it based on the most likely diagnosis						
IM1.17	Order and interpret diagnostic testing based on the clinical diagnosis including 12 lead ECG, Chest radiograph, blood cultures						
IM1.18	Perform and interpret a 12 lead ECG						
IM1.20	Determine the severity of valvular heart disease based on the clinical and laboratory and imaging features and determine the level of intervention required including surgery						
IM1.21	Describe and discuss and identify the clinical features of acute and subacute endocarditis, echocardiographic findings, blood culture and sensitivity and therapy						
IM1.22	Assist and demonstrate the proper technique in collecting specimen for blood culture						

IM1.23	Describe, prescribe and communicate non pharmacologic management of heart failure including sodium restriction, physical activity and limitations						
IM1.26	Develop document and present a management plan for patients with heart failure based on type of failure, underlying aetiology						
IM1.30	Administer an intramuscular injection with an appropriate explanation to the patient						
Acute Myocardial Infarction/ IHD							
IM2.6	Elicit document and present an appropriate history that includes onset evolution, presentation risk factors, family history, comorbid conditions, complications, medication, history of atherosclerosis, IHD and coronary syndromes						
IM2.7	Perform, demonstrate and document a physical examination including a vascular and cardiac examination that is appropriate for the clinical presentation						
IM2.8	Generate document and present a differential diagnosis based on the clinical presentation and prioritise based on “cannot miss”, most likely diagnosis and severity						
IM2.9	Distinguish and differentiate between stable and unstable angina and AMI based on the						

	clinical presentation						
IM2.10	Order, perform and interpret an ECG						
IM2.11	Order and interpret a Chest X-ray and markers of acute myocardial infarction						
IM2.12	Choose and interpret a lipid profile and identify the desirable lipid profile in the clinical context						
IM2.22	Perform and demonstrate in a mannequin BLS						
IM2.24	Counsel and communicate to patients with empathy lifestyle changes in atherosclerosis / post coronary syndromes						
Pneumonia							
IM3.4	Elicit document and present an appropriate history including the evolution, risk factors including immune status and occupational risk						
IM3.5	Perform, document and demonstrate a physical examination including general examination and appropriate examination of the lungs that establishes the diagnosis, complications and severity of disease						
IM3.6	Generate document and present a differential diagnosis based on the clinical features, and prioritise the diagnosis based on the presentation						

IM3.7	Order and interpret diagnostic tests based on the clinical presentation including: CBC, Chest X ray PA view, Mantoux, sputum gram stain, sputum culture and sensitivity, pleural fluid examination and culture, HIV testing and ABG						
IM3.8	Demonstrate in a mannequin and interpret results of an arterial blood gas examination						
IM3.9	Demonstrate in a mannequin and interpret results of a pleural fluid aspiration						
IM3.10	Demonstrate the correct technique in a mannequin and interpret results of a blood culture						
IM3.11	Describe and enumerate the indications for further testing including HRCT, Viral cultures, PCR and specialised testing						
IM3.12	Select, describe and prescribe based on the most likely aetiology, an appropriate empirical antimicrobial based on the pharmacology and antimicrobial spectrum						
IM3.13	Select, describe and prescribe based on culture and sensitivity appropriate empaling antimicrobial based on the pharmacology and antimicrobial spectrum.						
IM3.14	Perform and interpret a sputum gram stain and AFB						
IM3.18	Communicate and counsel patient on family on the diagnosis and therapy of						

	pneumonia						
Fever and febrile syndromes							
IM4.9	Elicit document and present a medical history that helps delineate the aetiology of fever that includes the evolution and pattern of fever, associated symptoms, immune status, comorbidities, risk factors, exposure through occupation, travel and environment and medication use						
IM4.10	Perform a systematic examination that establishes the diagnosis and severity of presentation that includes: general skin mucosal and lymph node examination, chest and abdominal examination (including examination of the liver and spleen)						
IM4.11	Generate a differential diagnosis and prioritise based on clinical features that help distinguish between infective, inflammatory, malignant and rheumatologic causes						
IM4.12	Order and interpret diagnostic tests based on the differential diagnosis including: CBC with differential, peripheral smear, urinary analysis with sediment, Chest X ray, blood and urine cultures, sputum gram stain and cultures, sputum AFB and cultures, CSF analysis, pleural and body fluid analysis, stool routine						

	and culture and QBC						
IM4.13	Perform and interpret a sputum gram stain						
IM4.14	Perform and interpret a sputum AFB						
IM4.15	Perform and interpret a malarial smear						
IM4.17	Observe and assist in the performance of a bone marrow aspiration and biopsy in a simulated environment						
IM4.19	Assist in the collection of blood and wound cultures						
IM4.20	Interpret a PPD (Mantoux)						
IM4.23	Prescribe drugs for malaria based on the species identified, prevalence of drug resistance and national programs						
IM4.24	Develop an appropriate empiric treatment plan based on the patient's clinical and immune status pending definitive diagnosis						
IM4.25	Communicate to the patient and family the diagnosis and treatment						
IM4.26	Counsel the patient on malarial prevention						
Liver diseases							
IM5.9	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 history and family history						
IM5.10	Perform a systematic examination that establishes the diagnosis and severity that includes nutritional status, mental status, jaundice, abdominal distension ascites, features of portosystemic hypertension and hepatic encephalopathy						
IM5.14	Outline a diagnostic approach to liver disease based on hyperbilirubinemia, liver function changes and hepatitis serology						
IM5.17	Enumerate the indications, precautions and counsel patients on vaccination for hepatitis						
HIV							
IM6.7	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						
IM6.8	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology for the presenting symptom						
IM6.14	Perform and interpret AFB sputum						

IM6.15	Demonstrate in a model the correct technique to perform a lumbar puncture						
IM6.19	Counsel patients on prevention of HIV transmission						
IM6.20	Communicate diagnosis, treatment plan and subsequent follow up plan to patients						
IM6.21	Communicate with patients on the importance of medication adherence						
IM6.22	Demonstrate understanding of ethical and legal issues regarding patient confidentiality and disclosure in patients with HIV						
IM6.23	Demonstrate a non-judgemental attitude to patients with HIV and to their lifestyles						
Rheumatologic problems							
IM7.11	Elicit document and present a medical history that will differentiate the aetiologies of disease						
IM7.12	Perform a systematic examination of all joints, muscle and skin that will establish the diagnosis and severity of disease						
IM7.15	Enumerate the indications for and interpret the results of : CBC, anti- CCP, RA, ANA, DNA and other tests of autoimmunity						
IM7.17	Enumerate the indications and interpret plain radiographs of joints						

IM7.18	Communicate diagnosis, treatment plan and subsequent follow up plan to patients						
IM7.20	Select, prescribe and communicate appropriate medications for relief of joint pain						
IM7.21	Select, prescribe and communicate preventive therapy for crystalline arthropathies						
IM7.22	Select, prescribe and communicate treatment option for systemic rheumatologic conditions						
IM7.24	Communicate and incorporate patient preferences in the choice of therapy						
IM7.25	Develop and communicate appropriate follow up and monitoring plans for patients with rheumatologic conditions						
IM7.26	Demonstrate an understanding of the impact of rheumatologic conditions on quality of life, well being, work and family						
Hypertension							
IM8.9	Elicit document and present a medical history that includes: duration and levels, symptoms, comorbidities, lifestyle, risk factors, family history, psychosocial and environmental factors, dietary assessment, previous and concomitant therapy						

IM8.10	Perform a systematic examination that includes : an accurate measurement of blood pressure, fundus examination, examination of vasculature and heart						
IM8.11	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology						
IM8.15	Recognise, prioritise and manage hypertensive emergencies						
IM8.16	Develop and communicate to the patient lifestyle modification including weight reduction, moderation of alcohol intake, physical activity and sodium intake						
IM8.17	Perform and interpret a 12 lead ECG						
IM8.18	Incorporate patient preferences in the management of HTN						
IM8.19	Demonstrate understanding of the impact of Hypertension on quality of life, well being, work and family						
Anemia							
IM9.3	Elicit document and present a medical history that includes symptoms, risk factors including GI bleeding, prior history, medications, menstrual history, and family history						

IM9.4	Perform a systematic examination that includes : general examination for pallor, oral examination, DOAP session of hyper dynamic circulation, lymph node and splenic examination						
IM9.5	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology						
IM9.6	Describe the appropriate diagnostic work up based on the presumed aetiology						
IM9.9	Order and interpret tests for anemia including hemogram, red cell indices, reticulocyte count, iron studies, B12 and folate						
IM9.10	Describe, perform and interpret a peripheral smear and stool occult blood						
IM9.13	Prescribe replacement therapy with iron, B12, folate						
IM9.15	Communicate the diagnosis and the treatment appropriately to patients						
IM9.16	Incorporate patient preferences in the management of anemia						
IM9.19	Assist in a blood transfusion						
IM9.20	Communicate and counsel patients with methods to prevent nutritional anemia						
Acute kidney injury and chronic renal failure							

IM10.12	Elicit document and present a medical history that will differentiate the aetiologies of disease, distinguish acute and chronic disease, identify predisposing conditions, nephrotoxic drugs and systemic causes						
IM10.13	Perform a systematic examination that establishes the diagnosis and severity including determination of volume status, presence of edema and heart failure, features of uraemia and associated systemic disease						
IM10.15	Describe the appropriate diagnostic work up based on the presumed aetiology						
IM10.17	Describe and calculate indices of renal function based on available laboratories including FENa (Fractional Excretion of Sodium) and CrCl (Creatinine Clearance)						
IM10.18	Identify the ECG findings in hyperkalemia						
IM10.20	Describe and discuss the indications to perform arterial blood gas analysis: interpret the data						
IM10.21	Describe and discuss the indications for and insert a peripheral intravenous catheter						
IM10.22	Describe and discuss the indications, demonstrate in a model and assist in the insertion of a central venous or a dialysis catheter						

IM10.23	Communicate diagnosis treatment plan and subsequent follow up plan to patients						
IM10.24	Counsel patients on a renal diet						
Diabetes Mellitus							
IM11.7	Elicit document and present a medical history that will differentiate the aetiologies of diabetes including risk factors, precipitating factors, lifestyle, nutritional history, family history, medication history, co-morbidities and target organ disease						
IM11.8	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)						
IM11.11	Order and interpret laboratory tests to diagnose diabetes and its complications including: glucoses, glucose tolerance test, glycosylated hemoglobin, urinary micro albumin, ECG, electrolytes, ABG, ketones, renal function tests and lipid profile						
IM11.12	Perform and interpret a capillary blood glucose test						
IM11.13	Perform and interpret a urinary ketone estimation with a dipstick						

IM11.19	Demonstrate and counsel patients on the correct technique to administer insulin						
IM11.20	Demonstrate to and counsel patients on the correct technique of self monitoring of blood glucoses						
Thyroid Dysfunction							
IM12.5	Elicit document and present an appropriate history that will establish the diagnosis cause of thyroid dysfunction and its severity						
IM12.6	Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and severity including systemic signs of thyrotoxicosis and hypothyroidism, palpation of the pulse for rate and rhythm abnormalities, neck palpation of the thyroid and lymph nodes and cardiovascular findings						
IM12.7	Demonstrate the correct technique to palpate the thyroid						
IM12.9	Order and interpret diagnostic testing based on the clinical diagnosis including CBC, thyroid function tests and ECG and radio iodine uptake and scan						
IM12.10	Identify atrial fibrillation, pericardial effusion and bradycardia on ECG						
IM12.11	Interpret thyroid function tests in hypo and hyperthyroidism						

IM12.14	Write and communicate to the patient appropriately a prescription for thyroxine based on age, sex, and clinical and biochemical status						
Common malignancies							
IM13.8	Perform and demonstrate a physical examination that includes an appropriate general and local examination that excludes the diagnosis, extent spread and complications of cancer						
Obesity							
IM14.6	Elicit and document and present an appropriate history that includes the natural history, dietary history, modifiable risk factors, family history, clues for secondary causes and motivation to lose weight						
IM14.7	Perform, document and demonstrate a physical examination based on the history that includes general examination, measurement of abdominal obesity, signs of secondary causes and comorbidities						
IM14.8	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely diagnosis						
IM14.9	Order and interpret diagnostic tests based on the clinical diagnosis including blood glucose, lipids, thyroid function tests etc.						

IM14.11	Communicate and counsel patient on behavioural, dietary and lifestyle modifications						
IM14.12	Demonstrate an understanding of patient's inability to adhere to lifestyle instructions and counsel them in a non - judgemental way						
GI Bleeding							
IM15.2	Enumerate, describe and discuss the evaluation and steps involved in stabilizing a patient who presents with acute volume loss and GI bleed						
IM15.4	Elicit and document and present an appropriate history that identifies the route of bleeding, quantity, grade, volume loss, duration, etiology, comorbid illnesses and risk factors						
IM15.5	Perform, demonstrate and document a physical examination based on the history that includes general examination, volume assessment and appropriate abdominal examination						
IM15.7	Demonstrate the correct technique to perform an anal and rectal examination in a mannequin or equivalent						
IM15.8	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely						

	diagnosis						
IM15.9	Choose and interpret diagnostic tests based on the clinical diagnosis including complete blood count, PT and PTT, stool examination, occult blood, liver function tests, H.pylori test.						
IM15.13	Observe cross matching and blood / blood component transfusion						
IM15.18	Counsel the family and patient in an empathetic non-judgmental manner on the diagnosis and therapeutic options						
Diarrheal diseases							
IM16.4	Elicit and document and present an appropriate history that includes the natural history, dietary history, travel , sexual history and other concomitant illnesses						
IM16.5	Perform, document and demonstrate a physical examination based on the history that includes general examination, including an appropriate abdominal examination						
IM16.7	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely diagnosis						
IM16.8	Choose and interpret diagnostic tests based on the						

	clinical diagnosis including complete blood count, and stool examination						
IM16.9	Identify common parasitic causes of diarrhea under the microscope in a stool specimen						
IM16.10	Identify vibrio cholera in a hanging drop specimen						
IM16.15	Distinguish based on the clinical presentation Crohn's disease from Ulcerative Colitis						
Headache							
IM17.2	Elicit and document and present an appropriate history including aura, precipitating aggravating and relieving factors, associated symptoms that help identify the cause of headaches						
IM17.4	Perform and demonstrate a general neurologic examination and a focused examination for signs of intracranial tension including neck signs of meningitis						
IM17.5	Generate document and present a differential diagnosis based on the clinical features, and prioritise the diagnosis based on the presentation						
IM17.6	Choose and interpret diagnostic testing based on the clinical diagnosis including imaging						
IM17.8	Demonstrate in a mannequin or equivalent the correct technique						

	for performing a lumbar puncture						
IM17.9	Interpret the CSF findings when presented with various parameters of CSF fluid analysis						
IM17.14	Counsel patients with migraine and tension headache on lifestyle changes and need for prophylactic therapy						
Cerebrovascular accident							
IM18.3	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						
IM18.5	Perform, demonstrate & document physical examination that includes general and a detailed neurologic examination as appropriate, based on the history						
IM18.6	Distinguish the lesion based on upper vs lower motor neuron, side, site and most probable nature of the lesion						
IM18.7	Describe the clinical features and distinguish, based on clinical examination, the various disorders of speech						
IM18.10	Choose and interpret the appropriate diagnostic testing in young patients with a cerebrovascular accident (CVA)						

IM18.17	Counsel patient and family about the diagnosis and therapy in an empathetic manner						
Movement disorders							
IM19.3	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 movement disorders						
IM19.4	Perform, demonstrate and document a physical examination that includes a general examination and a detailed neurologic examination using standard movement rating scales						
IM19.5	Generate document and present a differential diagnosis and prioritise based on the history and physical examination						
IM19.6	Make a clinical diagnosis regarding on the anatomical location, nature and cause of the lesion based on the clinical presentation and findings						
IM19.7	Choose and interpret diagnostic and imaging tests in the diagnosis of movement disorders						
Envenomation							
IM20.2	Describe, demonstrate in a volunteer or a mannequin and educate (to other health care workers / patients) the correct initial management of patient						

	with a snake bite in the field						
IM20.4	Elicit and document and present an appropriate history, the circumstance, time, kind of snake, evolution of symptoms in a patient with snake bite						
IM20.5	Perform a systematic examination, document and present a physical examination that includes general examination, local examination, appropriate cardiac and neurologic examination						
IM20.6	Choose and interpret the appropriate diagnostic testing in patients with snake bites						
Poisoning							
IM21.7	Counsel family members of a patient with suspected poisoning about the clinical and medico legal aspects with empathy						
Nutritional and Vitamin deficiencies							
IM23.5	Counsel and communicate to patients in a simulated environment with illness on an appropriate balanced diet						
Geriatrics							
IM24.2	Perform multidimensional geriatric assessment that includes medical, psycho-social and functional components						
Miscellaneous infections							
IM25.4	Elicit document and present a medical history that helps delineate the aetiology of these diseases that includes the						

	evolution and pattern of symptoms, risk factors, exposure through occupation and travel						
IM25.5	Perform a systematic examination that establishes the diagnosis and severity of presentation that includes: general skin, mucosal and lymph node examination, chest and abdominal examination (including examination of the liver and spleen)						
IM25.6	Generate a differential diagnosis and prioritise based on clinical features that help distinguish between infective, inflammatory, malignant and rheumatologic causes						
IM25.7	Order and interpret diagnostic tests based on the differential diagnosis including: CBC with differential, blood biochemistry, peripheral smear, urinary analysis with sediment, Chest X ray, blood and urine cultures, sputum gram stain and cultures, sputum AFB and cultures, CSF analysis, pleural and body fluid analysis, stool routine and culture and QBC						
IM25.9	Assist in the collection of blood and other specimen cultures						
IM25.11	Develop an appropriate empiric treatment plan based on the patient's clinical and immune status pending definitive diagnosis						

IM25.12	Communicate to the patient and family the diagnosis and treatment of identified infection						
IM25.13	Counsel the patient and family on prevention of various infections due to environmental issues						
The role of physician in the community							
IM26.19	Demonstrate ability to work in a team of peers and superiors						
IM26.20	Demonstrate ability to communicate to patients in a patient, respectful, non threatening, non judgemental and empathetic manner						
IM26.21	Demonstrate respect to patient privacy						
IM26.22	Demonstrate ability to maintain confidentiality in patient care						
IM26.23	Demonstrate a commitment to continued learning						
IM26.24	Demonstrate respect in relationship with patients, fellow team members, superiors and other health care workers						
IM26.25	Demonstrate responsibility and work ethics while working in the health care team						
IM26.26	Demonstrate ability to maintain required documentation in health care (including correct use of medical records)						
IM26.27	Demonstrate personal grooming that is adequate and appropriate for health care						

	responsibilities						
IM26.28	Demonstrate adequate knowledge and use of information technology that permits appropriate patient care and continued learning						
IM26.29	Communicate diagnostic and therapeutic opitons to patient and family in a simulated environment						
IM26.30	Communicate care opitons to patient and family with a terminal illness in a simulated environment						
IM26.31	Demonstrate awareness of limitations and seeks help and consultations appropriately						
IM26.32	Demonstrate appropriate respect to colleagues in the profession						
IM26.33	Demonstrate an understanding of the implications and the appropriate procedures and response to be followed in the event of medical errors						
IM26.34	Identify conflicts of interest in patient care and professional relationships and describe the correct response to these conflicts						
IM26.35	Demonstrate empathy in patient encounters						
IM26.36	Demonstrate ability to balance personal and professional priorities						

IM26.37	Demonstrate ability to manage time appropriately						
IM26.38	Demonstrate ability to form and function in appropriate professional networks						
IM26.39	Demonstrate ability to pursue and seek career advancement						
IM26.40	Demonstrate ability to follow risk management and medical error reduction practices where appropriate						
IM26.41	Demonstrate ability to work in a mentoring relationship with junior colleagues						
IM26.42	Demonstrate commitment to learning and scholarship						
IM26.48	Demonstrate altruism						
IM26.49	Administer informed consent and approriately adress patient queries to a patient being enrolled in a research protocol in a simulated environment						
Integration Anatomy							
AN20.8 Vertical integration	Identify & demonstrate palpation of femoral, popliteal, post tibial, anti tibial & dorsalis pedis blood vessels in a simulated environment						
AN20.9 Vertical integration	Identify & demonstrate Palpation of vessels (femoral, popliteal,dorsalis pedis,post tibial), Mid inguinal point, Surface projection of: femoral nerve, Saphenous opening, Sciatic, tibial, common peroneal & deep peroneal						

	nerve, great and small saphenous veins						
AN24.2 Vertical integration	Identify side, external features and relations of structures which form root of lung & bronchial tree and their clinical correlate						
AN25.7 Vertical integration	Identify structures seen on a plain x-ray chest (PA view)						
AN25.8 Vertical integration	Identify and describe in brief a barium swallow						
AN25.9 Vertical integration	Demonstrate surface marking of lines of pleural reflection, Lung borders and fissures, Trachea, Heart borders, Apex beat & Surface projection of valves of heart						
AN56.1 Vertical integration	Describe & identify various layers of meninges with its extent & modifications						
AN62.2 Vertical integration	Describe & demonstrate surfaces, sulci, gyri, poles, & functional areas of cerebral hemisphere						
AN62.6 Vertic	Describe & identify formation, branches &						

al integr ation	major areas of distribution of circle of Willis						
PY4.9 Vertical integrati on	Discuss the physiology aspects of: peptic ulcer, gastro- oesophageal reflux disease, vomiting, diarrhoea, constipation, Adynamic ileus, Hirschsprung's disease						
PY5.13	Record and interpret normal ECG in a volunteer or simulated environment						
PY5.16	Record Arterial pulse tracing using finger plethysmography in a volunteer or simulated environment						
PY11.1 4 Vertical integrati on	Demonstrate Basic Life Support in a simulated environment						
PY6.8 Vertical Integrati on	Demonstrate the correct techinque to perform & interpret Spirometry						
BI11.4 Vertical integrati on	Perform urine analysis to estimate and determine normal and abnormal constituents						
BI1.26 Vertical integrati on	Calculate albumin: globulin (AG) ratio and creatinine clearance						
BI1.27 Vertical integrati on	Calculate energy content of different food Items, identify food items with high and low glycemic index and explain the importance of these in the diet						
PA13.5	Perform, Identify and describe the peripheral						

	blood picture in anemia						
PA14.3 Vertical integration	Identify and describe the peripheral smear in microcytic anemia						
PA21.3	Differentiate platelet from clotting disorders based on the clinical and hematologic features						
PA24.3	Describe and identify the microscopic features of peptic ulcer						
PA25.6	Interpret a liver function and viral hepatitis serology panel. Distinguish obstructive from non obstructive jaundice based on clinical features and liver function tests						
PA27.8	Interpret abnormalities in cardiac function testing in acute coronary syndromes						
PA35.3 Vertical integration	Identify the etiology of meningitis based on given CSF parameters						
MI2.3	Identify the microbial agents causing Rheumatic heart disease & infective Endocarditis						
MI2.6	Identify the causative agent of malaria and filariasis						
MI3.2	Identify the common etiologic agents of diarrhea and dysentery						
MI5.3	Identify the microbial agents causing meningitis						

MI6.2	Identify the common etiologic agents of upper respiratory tract infections (Gram Stain)						
MI6.3	Identify the common etiologic agents of lower respiratory tract infections (Gram Stain & Acid fast stain).						
PH1.12	Calculate the dosage of drugs using appropriate formulae for an individual patient, including children, elderly and patient with renal dysfunction						
PH2.4	Demonstrate the correct method of calculation of drug dosage in patients including those used in special situations						
PH3.1	Write a rational, correct and legible generic prescription for a given condition and communicate the same to the patient						
PH3.3	Perform a critical evaluation of the drug promotional literature						
PH3.5	To prepare and explain a list of P-drugs for a given case/condition						
PH5.1	Communicate with the patient with empathy and ethics on all aspects of drug use						
PH5.4	Explain to the patient the relationship between cost of treatment and patient compliance						
CM5.2	Describe and demonstrate the correct method of performing a nutritional assessment of						

	individuals, families and the community by using the appropriate method						
CM5.4	Plan and recommend a suitable diet for the individuals and families based on local availability of foods and economic status, etc in a simulated environment						
CM6.2	Describe and discuss the principles and demonstrate the methods of collection, classification, analysis, interpretation and presentation of statistical data						
CM6.3	Describe, discuss and demonstrate the application of elementary statistical methods including test of significance in various study designs						
CM6.4	Enumerate, discuss and demonstrate common sampling techniques, simple statistical methods, frequency distribution, measures of central tendency and dispersion						
CM7.4	Define, calculate and interpret morbidity and mortality indicators based on given set of data						
CM7.6	Enumerate and evaluate the need of screening tests						
CM7.7	Describe and demonstrate the steps in the Investigation of an epidemic of communicable disease and describe the principles of control measures.						

FM14.2	Demonstrate the correct technique of clinical examination in a suspected case of poisoning & prepare medico-legal report in a simulated/ supervised environment						
FM14.3	Assist and demonstrate the proper technique in collecting, preserving and dispatch of the exhibits in a suspected case of poisoning, along with clinical examination .						
DR9.2	Demonstrate (and classify based on) the clinical features of leprosy including an appropriate neurologic examination						
DR10.1	Identify and classify syphilis based on the presentation and clinical manifestations						
DR10.5	Counsel in a non-judgemental and empathetic manner patients on prevention of sexually transmitted diseases						
DR10.7	Identify and differentiate based on the clinical features non-syphilitic sexually transmitted diseases (chancroid, donovanosis and LGV)						
DR11.2	Identify and distinguish the dermatologic manifestations of HIV its complications, opportunistic infections and adverse reactions						
DR12.7	Identify and distinguish fixed drug eruptions and Steven Johnson syndrome from other skin lesions						
DR16.1	Identify and distinguish skin lesions of SLE						

DR16.2	Identify and distinguish Raynaud's phenomenon						
DR17.1	Enumerate and identify the cutaneous findings in vitamin A deficiency						
AS2.1 Vertical integration	Enumerate the indications, describe the steps and demonstrate in a simulated environment basic life support in adults children and neonates						
AS2.2	Enumerate the indications, describe the steps and demonstrate in a simulated environment advanced life support in adults and children						
AS3.2 Horizontal integration	Elicit, present and document an appropriate history including medication history in a patient undergoing Surgery as it pertains to a preoperative anaesthetic evaluation						
AS3.3 Horizontal integration	Demonstrate and document an appropriate clinical examination in a patient undergoing General Surgery						
AS3.4 Horizontal integration	Choose and interpret appropriate testing for patients undergoing Surgery						
AS3.5 Horizontal integration	Determine the readiness for General Surgery in a patient based on the preoperative evaluation						
PS4.2 Horizontal integration	Elicit, describe and document clinical features of alcohol and substance use disorders						

PS4.3 Horizontal integration	Enumerate and describe the indications and interpret laboratory and other tests used in alcohol and substance abuse disorders						
PS10.2 Horizontal integration	Enumerate, elicit, describe and document clinical features in patients with somatoform, dissociative and conversion disorders						
PS10.3 Horizontal integration	Enumerate and describe the indications and interpret laboratory and other tests used in somatoform, dissociative and conversion disorders						
PS12.2 Horizontal integration	Enumerate, elicit, describe and document clinical features in patients with magnitude and etiology of psychosomatic disorders						
PS12.3 Horizontal integration	Enumerate and describe the indications and interpret laboratory and other tests of psychosomatic disorders						
PS16.4 Horizontal integration	Demonstrate family education in a patient with psychiatric disorders occurring in the elderly in a simulated environment						
PE32.3 Horizontal integration	Interpret normal Karyotype and recognize Trisomy 21						
PE28.20	Counsel the child with asthma on the correct use of inhalers in a simulated environment						
PE34.5	Able to elicit, document and present history of contact with tuberculosis in every patient						

	encounter						
PE34.6	Identify a BCG scar						
PE34.7	Interpret a Mantoux test						
PE34.8	Interpret a Chest Radiograph						
PE34.9	Interpret blood tests in the context of laboratory evidence for tuberculosis						
PE34.11	Perform AFB staining						
PE28.19	Describe the etio-pathogenesis, clinical features, diagnosis, management and prevention of asthma in children						
PM4.5 Horizontal integration	Demonstrate correct assessment of muscle strength and range of movements						
PM6.1 Horizontal integration	Perform and demonstrate a clinical examination of sensory and motor deficits of peripheral nerve						
CT1.5	Elicit, document and present an appropriate medical history that includes risk factor, contacts, symptoms including cough and fever CNS and other manifestations						
CT1.6	Demonstrate and perform a systematic examination that establishes the diagnosis based on the clinical presentation that includes a a) general examination, b) examination of						

	the chest and lung including loss of volume, mediastinal shift, percussion and auscultation (including DOAP session of lung sounds and added sounds) c) examination of the lymphatic system and d) relevant CNS examination						
CT1.7	Perform and interpret a PPD (mantoux) and describe and discuss the indications and pitfalls of the test						
CT1.10	Perform and interpret an AFB stain						
CT1.11	Assist in the performance, outline the correct tests that require to be performed and interpret the results of a pleural fluid aspiration						
CT1.15	Prescribe an appropriate antituberculosis regimen based on the location of disease, smear positivity and negativity and co- morbidities based on current national guidelines including directly observed tuberculosis therapy (DOTS)						
CT1.17	Define criteria for the cure of Tuberculosis; describe and recognise the features of drug resistant tuberculosis, prevention and therapeutic regimens						
CT1.18	Educate health care workers on National Program of Tuberculosis and administering and monitoring the DOTS program						
CT1.19	Communicate with patients and family in an empathetic manner about the diagnosis, therapy						

CT2.8	Elicit document and present a medical history that will differentiate the aetiologies of obstructive airway disease, severity and precipitants						
CT2.10	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology						
CT2.11	Describe, discuss and interpret pulmonary function tests						
CT2.12	Perform and interpret peak expiratory flow rate						
CT2.13	Describe the appropriate diagnostic work up based on the presumed aetiology						
CT2.14	Enumerate the indications for and interpret the results of : pulse oximetry, ABG, Chest Radiograph						
CT2.15	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology						
CT2.18	Develop a therapeutic plan including use of bronchodilators and inhaled corticosteroids						
CT2.19	Develop a management plan for acute exacerbations including bronchodilators, systemic steroids, antimicrobial therapy						
CT2.21	Describe discuss and counsel patients appropriately on smoking cessation						
CT2.22	Demonstrate and counsel patient on the correct use of inhalers						

CT2.23	Communicate diagnosis treatment plan and subsequent follow up plan to patients						
CT2.9	Perform a systematic examination that establishes the diagnosis and severity that includes measurement of respiratory rate, level of respiratory distress, effort tolerance, breath sounds, added sounds, identification of signs of consolidation pleural effusion and pneumothorax						
DR5.2	Identify and differentiate scabies from other lesions						
DR6.2	Identify and differentiate pediculosis from other skin lesions						
DR17.1	Enumerate and identify the cutaneous findings in vitamin A deficiency						
AS2.1	Enumerate the indications, describe the steps and demonstrate in a simulated environment basic life support in adults children and neonates						
PS14.2	Enumerate, elicit, describe and document clinical features in patients with psychiatric disorders occurring in childhood and adolescence						
PS14.4	Demonstrate family education in a patient with psychiatric disorders occurring in childhood and adolescence in a simulated environment						
PS15.3	Elicit and document a history and clinical examination and choose appropriate						

	investigations in a patient with mental retardation						
OG18.2	Demonstrate the steps of neonatal resuscitation in a simulated environment						
PM3.4	Demonstrate spasticity, rigidity and dystonia in children with cerebral palsy						
PS1.1	Establish rapport and empathy with patients						
PS1.3	Demonstrate breaking of bad news in a simulated environment						
PS1.4	Describe and demonstrate the importance of confidentiality in patient encounters						
PS3.3	Elicit, present and document a history in patients presenting with a mental disorder						
PS3.4	Describe the importance of establishing rapport with patients						
PS3.5	Perform, demonstrate and document a minimental examination						
PS3.9	Describe the steps and demonstrate in a simulated environment family education in patients with organic psychiatric disorders						
PS4.2	Elicit, describe and document clinical features of alcohol and substance use disorders						
PS4.3	Enumerate and describe the indications and interpret laboratory and other tests used in alcohol and substance abuse						

	disorders						
PS4.5	Demonstrate family education in a patient with alcohol and substance abuse in a simulated environment						
PS5.2	Enumerate, elicit, describe and document clinical features, positive s						
PS5.4	Demonstrate family education in a patient with schizophrenia in a simulated environment						
PS6.2	Enumerate, elicit, describe and document clinical features in patients with depression						
PS6.3	Enumerate and describe the indications and interpret laboratory and other tests used in depression						
PS6.5	Demonstrate family education in a patient with depression in a simulated environment						
PS7.2	Enumerate, elicit, describe and document clinical features in patients with bipolar disorders						
PS7.3	Enumerate and describe the indications and interpret laboratory and other tests used in bipolar disorders						
PS7.5	Demonstrate family education in a patient with bipolar disorders in a simulated environment						

PS8.2	Enumerate, elicit, describe and document clinical features in patients with anxiety disorders						
PS8.3	Enumerate and describe the indications and interpret laboratory and other tests used in anxiety disorders						
PS8.5	Demonstrate family education in a patient with anxiety disorders in a simulated environment						
PS9.2	Enumerate, elicit, describe and document clinical features in patients with stress related disorders						
PS9.3	Enumerate and describe the indications and interpret laboratory and other tests used in stress related disorders						
PS9.5	Demonstrate family education in a patient with stress related disorders in a simulated environment						
PS10.2	Enumerate, elicit, describe and document clinical features in patients with somatoform, dissociative and conversion disorders						
PS10.3	Enumerate and describe the indications and interpret laboratory and other tests used in somatoform, dissociative and conversion disorders						
PS10.5	Demonstrate family education in a patient with somatoform, dissociative and conversion disorders in a						

	simulated environment						
PS11.2	Enumerate, elicit, describe and document clinical features in patients with personality disorders						
PS11.3	Enumerate and describe the indications and interpret laboratory and other tests used in personality disorders						
PS11.5	Demonstrate family education in a patient with personality disorders in a simulated environment						
PS12.2	Enumerate, elicit, describe and document clinical features in patients with magnitude and etiology of psychosomatic disorders						
PS12.3	Enumerate and describe the indications and interpret laboratory and other tests of psychosomatic disorders						
PS12.5	Demonstrate family education in a patient with psychosomatic disorders in a simulated environment						
PS13.2	Enumerate, elicit, describe and document clinical features in patients with magnitude and etiology of psychosexual and gender identity disorders						
PS13.3	Enumerate and describe the indications and interpret laboratory and other tests used in psychosexual and gender identity disorders						

PS13.5	Demonstrate family education in a patient with psychosexual and gender identity disorders in a simulated environment						
PS14.2	Enumerate, elicit, describe and document clinical features in patients with psychiatric disorders occurring in childhood and adolescence						
PS14.4	Demonstrate family education in a patient with psychiatric disorders occurring in childhood and adolescence in a simulated environment						
PS15.3	Elicit and document a history and clinical examination and choose appropriate investigations in a patient with mental retardation						
PS16.4	Demonstrate family education in a patient with psychiatric disorders occurring in the elderly in a simulated environment						
PH5.6	Demonstrate ability to educate public & patients about various aspects of drug use including drug dependence and OTC drugs.						
IM17.14	Counsel patients with migraine and tension headache on lifestyle changes and need for prophylactic therapy						
IM24.2	Perform multidimensional geriatric assessment that includes medical,						

	psycho-social and functional components						
DR1.2	Identify and grade the various common types of acne						
DR3.1	Identify and distinguish psoriatic lesions from other causes						
DR3.2	Demonstrate the grattage test						
DR4.1	Identify and distinguish lichen planus lesions from other causes						
DR5.2	Identify and differentiate scabies from other lesions in adults and children						
DR6.2	Identify and differentiate pediculosis from other skin lesions in adults and children						
DR7.2	Identify Candida species in fungal scrapings and KOH mount						
DR8.2	Identify and distinguish herpes simplex and herpes labialis from other skin lesions						
DR8.3	Identify and distinguish herpes zoster and varicella from other skin lesions						
DR8.4	Identify and distinguish viral warts from other skin lesions						
DR8.5	Identify and distinguish molluscum contagiosum from other skin lesions						
DR8.6	Enumerate the indications, describe the procedure and perform a Tzanck smear						
DR9.2	Demonstrate (and classify based on) the clinical features of leprosy including an						

	appropriate neurologic examination						
DR10.1	Identify and classify syphilis based on the presentation and clinical manifestations						
DR10.2	Identify spirochete in a dark ground microscopy						
DR10.5	Counsel in a non-judgemental and empathetic manner patients on prevention of sexually transmitted disease						

General Medicine

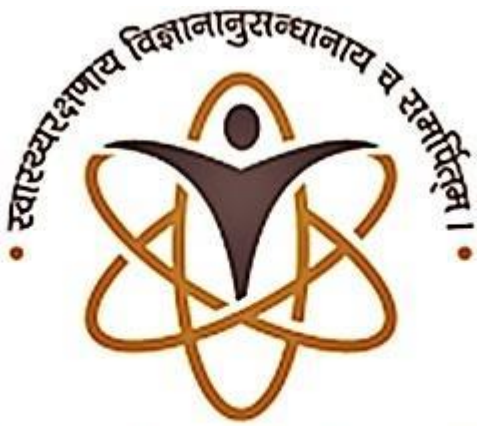
Subject: General Medicine **Third Year MBBS**

Sub Item: Theory lectures/ Clinical postings/Tutorials/seminars/self directed learning/ Electives

Final Summary

Sr. No	Description	Dates		Attendance percentage	Status	Signature of Teacher
		From	To		Complete/ Incomplete	
1	Theory lectures					
2	**Clinical postings**					
3	AETCOM Module					
4.	Electives					
5	Vertical Integraon					

6	Extracurricular activities					
7	Sports /Physical Education					



Maharashtra University of Health Sciences

PHASE II to Phase IV MBBS

COMPETENCY BASED CURRICULUM-2019 batch

GENERAL MEDICINE LOG BOOK

NAME OF COLLEGE-

NAME OF STUDENT-

ROLL NUMBER- **BATCH – A/B/C/D/E/F**

CONTENTS

PERSONAL DETAILS

Name of student-

Mobile Number-

Residential Address-

Photo stick here

Father/Guardians contact no.

Email-

Email of Father/Guardian-

Date of admission to MBBS course-

Date of beginning of current phase-

LOGBOOK CERTIFICATE (General Medicine)

This is to certify that the candidate Mr/ Ms ……, Reg No....., admitted in the year 2019-20 in the ---------- Medical College,---------- has satisfactorily completed / has not completed all assignments /requirements mentioned in this logbook for Second to fourth year MBBS course in the subject(s) of General Medicine Foundation Course/ AETCOM during the period from …… to…… . She / He is / Eligible/ not eligible to appear for the summative (University) assessment as on the date given below.

Signature of all Unit In charges-

Signature of Head of the Department

Principal/Dean of the College

Place:
Date:

GENERAL INSTRUCTIONS

1. The logbook is a record of the academic / co-curricular activities of the designated student, who would be responsible for maintaining his/her logbook.
2. The log book is a record of the academic / nonacademic activities of the student. Each Medical student is responsible for maintaining their logbook.
3. This logbook is prepared as per the guidelines of MCI for implementation of Competency based curriculum for Phase II to Phase IV Professional MBBS students in the subject of General Medicine.
4. Students are instructed to keep their logbook entries up to date. It is the responsibility of the student to enter their activity in respective pages & get them duly singed by the supervising faculty.
5. Entries in the logbook will be in accordance with activities done in the departments and has to be scrutinized by the Head of all the concerned departments.
6. The logbook shall be kept as record work of the candidate for that department / specialty & be submitted to department as a bonafide record of the candidate before appearing for the University examination.

NOTE:

1. A clear record of all components that add to the internal assessment marks needs to be maintained by the institution and retained by them for at least 5 years after completion of the examination. Institutions may be asked to provide these details by the University as and when required.

2. The contents in the log book are suggested guidelines. The institutions can make necessary changes as per the needs.

3. The student is responsible for getting the entries in the logbook verified by the Faculty in charge regularly.

4. Entries in the logbook will reflect the activities undertaken in the department & have to be scrutinized by the Head of the concerned department.

5. The logbook is a record of various activities by the student like:- Overall participation & performance, Attendance, Participation in sessions, Record of completion of pre-determined activities., Acquisition of selected competencies.

Record of Attendance for Theory and clinical postings

	Duration	Practical		Theory		Signature of Unit in charge/ HOD
		No of days	Days attended	No of days	Days attended	
Phase II						
First clinical posting	4 weeks					
Second clinical posting	4 weeks					
Phase III Part I	8 weeks					
Phase III Part I	4 weeks					

Dates of completion of clinical postings

Phase	From	To	Absent days	Journal completed	Signature of unit in charges with name and dates
II					
III Part I					
III Part II					

SCHEME OF EXAMINATION - Internal Assessment

Sr. No.	Internal assessment	Date/Month /Year	Marks obtained		Out of 4.5	Signature of student
			Theory out of	Practical out of		
1	First	September				
2	Second	September				
3	Third Part I	October				
4	Third Part II	January				
	Total					
	Round up-					

Duration and details of course

Sr. No.	Phases		Semester	No of Months
1	I	First professional Preclinical phase	Semester 1 & Semester 2	1 + 12 months
2	II	Second professional Paraclinical Phase	Semester 3 & Semester 4	11 Months
3	III Part I	Third professional Clinical Phase	Semester 5 & Semester 6	13 Months
4	Electives, skills and assessment			2 Months
5	III Part II	Third professional Clinical Phase	Semester 7, Semester 8 Semester 9	13 Months

Phase	Hours	Total hrs
First I		
Early clinical exposure	90	
Second II		
Lectures	75	615 hrs
Tutorial/Seminars/Integrated learning	--	-
Self directed learning	--	--
Third Part I		
Lectures	25	65 hrs
Tutorial/Seminars/Integrated learning	35	
Self directed learning	5	
Third Part II		
Lectures	70	210 hrs
Tutorial/Seminars/Integrated learning	125	
Self directed learning	15	

Theory teaching

Learner – Doctor Programme (Clinical clerkship) (Reference- The Gazette of India: Part III-sec.4 pg 74-74)

The learner will function as a part of the health care team with the following responsibilities:

(i) Be part of the unit's outpatient services on admission days,
(ii) Remain with the admission unit until 6 PM except during designated class hours,
(iii) Be assigned patients admitted during each admission day for whom he/she will undertake responsibility, under the supervision of a senior resident or faculty member,
(iv) Participate in the unit rounds on its admission day and will present the assigned patients to the supervising physician,
(v) Follow the patient's progress throughout the hospital stay until discharge,
(vi) Participate, under supervision, in procedures, surgeries, deliveries etc. of assigned patients (according to responsibilities outlined in table 9),
(vii) Participate in unit rounds on at least one other day of the week excluding the admission day,
(viii) Discuss ethical and other humanitarian issues during unit rounds,
(ix) Attend all scheduled classes and educational activities,
(x) Document his/her observations in a prescribed log book / case record.
(xi) No learner will be given independent charge of the patient.

Year of curriculum	Focus of Learner- Doctor programme
Year 1	Introduction to hospital environment, early clinical exposure, understanding perspectives of illness

Year 2	History taking, physical examination, assessment of change in clinical status, communication and patient education
Year 3	All of the above and choice of investigations, basic procedures and continuity of care
Year 4	All of the above and decision making, management and outcomes

Assessment of Skill competencies

Assessment of DOAP Sessions

Phase	Competency Nos.	Topics & Subtopics	Teaching & Learning method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
Phase II	1.12	Pulse examination with demonstration				
	1.13	Measure BP accurately				
	1.14	JVP				
	4.10	Examination of skin, lymph node, chest and abdominal examination				
	2.7	CVS Examination with demonstration				
	3.4 & 3.5	Orientation to history taking, general examination & systemic examination of Respiratory system				
Phase III part II (fourth year)	IM 3.9/ IM 5.15	Demonstrate in a mannequin and interpret results of a pleural fluid Aspiration				
	IM5.15	Assist in the performance and interpret the findings of an ascitic fluid analysis	Mannequins/bedside clinic/Real patient			
	M6.15/ M 17.8 17.9	Demonstrate in a model the correct technique to perform a lumbar Puncture	Mannequins/bedside clinic/ Real patient			
Feedback by Faculty-						
Phase II						
Phase III Part I						
Phase III Part II						

Assessments of Skill acquisition Sessions

Phase	Competency Nos.	Topics & Subtopics	TL Method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
Phase II	1.30	Intramuscular injection	Simulator / Mannequin/Small group discussion			
		Ward round • Communication with patient • Patient Education				
Phase III **Part I**	IM4.15	Peripheral blood smear interpretation&Perform and interpret a malarial smear	Small group discussion			
		Ryles tube insertion	Simulation/ Real patient			
	IM4.20	Interpret a PPD (Mantoux)	Small group discussion			
	IM11.19	Demonstrate(and counsel) patients on the correct technique to administer insulin	Real patient			
	IM3.17	Describe and discuss the supportive therapy in patients with pneumonia including oxygen use and	Small group discussion			

		indications for ventilation (K)				
	IM11.13	Bedside urine analysisv&vPerform and interpret aurinary ketone estimation with a dipstick	Real patient			
	IM15.2 M15.11	Setting up IV infusion and calculating drip rate	Seminar/ Small group discussion /Casualty real patient			
Phase III part II (fourth year)	IM1.22	Assist and demonstrate the proper technique in collecting specimen for blood culture	Simulators/manneq uin			
	IM4.19	Assist in the collection of blood	Bed side clinics			
	IM11.12	Perform and interpret a capillary blood glucose test	Real patient			
	IM25.9	Assist in the collection of blood and other specimen cultures	Bed side clinic/real patients			
	IM9.19	Assist in a blood transfusion	Bed side clinic/real patients			
	IM15.13	Observe cross matching and blood / blood component transfusion	Bed side clinic/real patients			
	IM2.22	Perform and demonstrate in a mannequin BLS	DOAP			
	IM2.21	Observe and participate in a controlled environment an ACLS Program	Session in skills lab			
Feedback by Faculty						
Phase III Part I						

Phase III Part II	

Assessments of case presentation Sessions

Phase	Competency Nos.	Topics & Subtopics	TL Method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
Phase II	20.4 & 20.5	Medical emergency - snake bite – Elicit, present and document an detail history, Perform a systematic examination, document and present a local, appropriate cardiac and neurologic examination	Seminar/ Small Group discussion			
	CT2.20	Describe and discuss the principles and use of oxygen therapy in the hospital and at home	Lecture/ seminar/small group discussion /bedside clinic			
	CT2.22	Demonstrate and counsel patient on the correct use of inhaler	Small group discussion			
Phase III part II (fourth year)	IM10.21	Describe and discuss the indications for and insert a peripheral intravenous catheter	Seminar / lecture			
	IM11.20	Demonstrate to and counsel patients correct technique on the of self-monitoring of blood glucoses	Seminar/lecture			
	IM15.2	Enumerate, describe and discuss the evaluation and steps involved in	Seminar/lecture/smal			

		stabilizing a patient who presents with acute volume loss and GI Bleed	l group discussion			
	IM15.11	Develop, document and present a treatment plan that includes fluid resuscitation, blood and blood component transfusion, and specific therapy for arresting blood loss	Seminar/lecture/small group discussion			
	AS2.1	Enumerate the indications, describe the steps and demonstrate in a simulated environment basic life support in adults children and neonates	Seminar/lecture/small group discussion			
	IM17.9	Interpret the CSF findings when presented with various parameters of CSF fluid analysis	Seminar/lecture/small group discussion			
Feedback by Faculty						
Phase III Part I						
Phase III Part II						

Assessment of OSCE

Phase	Competency Nos.	Topics & Subtopics	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
Phase II	IM4.15 IM9.10	Perform and interpret a malarial smear Describe, perform and interpret a peripheral smear			
	IM11.13 BI11.4	Perform and interpret a urinary ketone estimation with a dipstick Perform urine analysis to estimate and determine			

		normal and abnormal constituents			
		Interprete Chest X Ray			
		Interprete blood culture			
		Interprete Hemogram- CBC etc			
		Interprete Liver function tests			
		Interprete CSF analysis			
		Interprete ascitic, pleural fluid			
		Interprete ABG			
Feedback by Faculty					
Phase III Part I					
Phase III Part II					

Skill acquisition Vertical integration

Phase	Competency Nos.	Topics & Subtopics	Teaching & Learning method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
Phase III	OG35.17	OBGY Demonstrate the correct technique of urinary catheterization in a simulated/ supervised environment	Small group discussion / real patient/ simulation			
	CT2.20	Chest Medicine – Describe and discuss the principles and use of oxygen therapy in the hospital and at home	Seminar/ Group discussion			
	CT2.22	Chest Medicine- Demonstrate and counsel patient on the correct use of inhalers	Small group discussion / Role play/ Real patient			
	AS2.1	Enumerate the indications,	DOAP			

		describe the steps and demonstrate in a simulated environment **basic life support in adults children and neonates**	Session in skills lab			
	AS2.2	Enumerate the indications, describe the steps and demonstrate in a simulated environment **advanced life support in adults and children**	DOAP Session in skills lab			
Feedback by Faculty						
Phase III Part I						
Phase III Part II						

Integrated teachings-

Phase	Subject	Hours	Competency Nos. Topics & Subtopics	Teaching & Learning method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
III Part I		**Total 9 hours (3 hours each for clinical Pharmacology, clinical Pathology and Clinical microbiology)**					
	Clinical Pharmacology	3hours	Clinical pharmacokinetics-1 hr Adverse drug reaction-1 hr Drug-Drug interaction-1 hr				
	Clinical Pathology	3hours	Anaemia and haemoglobinopathies-1 hr Hematological malignancies-1 hr Platelet disorder-1 hr				
	Clinical Microbiology	3hours	Pyrexia of unknown origin -1 hr Antimicrobial resistance -1 hr Viral haemorrhagic fever -1 hr				
III Part II		**Integrated teachings- Total 19 hours**					
	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				
	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				
	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				
	Geraiatrics	3 hours	Polypharmacy Falls Incontinence				
Feedback by Faculty							
Phase III Part I							
Phase III Part II							

AETCOM

75% Attendance is required for eligibility to appear for final examination in each professional year.

Maharashtra University of Health Sciences General Medicine Task Force for CBME Implementation			
Summary of AETCOM modules for Third and Fourth professional years			
	Third professional Year	**Fourth Professional Year**	Total
Number of Modules	5	9	14
Number of Hours for training	19	28	47
Number of Hours for SDL	06	16	22
Number of hours to be shown in time table of respective departments for AETCOM			
Hours of training by Medicine	10	15	25
Hours of training by Surgery	10	15	25
Hours of training by OBGY	05	09	14
Hours of training by Pediatrics	00	05	05

Assessment of AETCOM -

Phase	Competency Nos.	Topics & Subtopics	Teaching & Learning method	Attempt at activity First (F) Repeat (R) Remedial (Re)	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date
II	26.20	Demonstrate ability to communicate to patients in a respectful, non threatening, non judgemental and empathetic manner	**Small group discussion/Role play**			
	26.21 & 26.22	- Demonstrate respect to patient privacy - Demonstrate ability to maintain confidentiality in patient care	**Lecture/ Small group discussion**			
	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	**Lecture/ self directed learning/Small group discussion**			
	26.35	Demonstrate empathy in patient encounters	**Role play/ Case presentation**			
III Part I	26.29 - 26.31	Role of Physician in Community- Communicate diagnostic and therapeutic options to patient and family in a simulated environment Communicate care options to patient and family with a terminal illness in a simulated environment Demonstrate awareness of limitations and seeks	Lecture/ Small group discussion/Role play			

		help and consultations appropriately				
Module 3.3		Administer informed consent and appropriately address patient queries to a patient undergoing a Surgical/ therapeutic procedure in a simulated environment	Small group discussion/ Real patient/ Role play			
Module 4.4		Communication, Attitude and Ethics **Empathy, Doctor Patient Relationship , Effective Communication in terminally ill**	CBL /video with interactive lecture, role play / small group session with standardized patient in soft skills lab.			
Module 4.5		Ethics and attitude **Doctor Industry relationship- Conflicts of interests in patients care and professional**	Role play/ CBL with interactive lecture			
Module 4.8		Communication, Attitude and Ethics **Empathy, Death declaration, Handling emotions during death, Euthanasia , Breaking Bad News effectively**	CBL /video with interactive lecture, role play / small group session with standardized patient as relative in soft skills lab.			
Phase III Part II						
Module 4.1		**Foundation of Communication 5 Effectively communicating Diagnosis, Prognosis and therapy (Counseling skills)**	**Small group teaching with soft skills lab session related to Counseling skills**			
Module 4.2		Ethics Abortion, MTP, Reproductive rights and ethical conflicts	CBL with interactive lecture (Can be a large class teaching)			

Module 4.9		Ethics Legal aspects of Care, Medical negligence and malpractices	CBL with interactive lecture/ small group discussions			
Feedback by Faculty						
Phase III Part I						
Phase III Part II						

Assessment of Tutorials

Phase	Topic	Hours	**Attempt at activity First (F) Repeat (R) Remedial (Re)**	**Decision of faculty Completed (C) Repeat (R) Remedial (Re)**	**Initial of faculty and date**
III Part I	Medical emergencies	1 hr			
	Valvular heart disease in adults	1 hr			
	Acynotic congenital heart disease in adults (ASD,VSD,PDA)	1 hr			
	Cynotic congenital heart disease in adults (TOF)	1 hr			
	Instruments- Video of procedures/Real/casewise	1 hr			
	Instruments	1 hr			
	X rays	1 hr			
	X rays	1 hr			
	ECG- Approach to basics of ECG	1 hr			
	ECG- How to read ECG?	1 hr			
III Part II	**ECG-**	10 Hours			
	How to interprete ECG?	1 hr			
	ECG-Diagnosing Myocardial infarctions	1 hr			
	ECG: Chamber enlargement	1 hr			
	ECG-Bundle branch blocks	1 hr			
	Electrolyte abnormalities on ECG	1 hr			
	Narrow Complex tacchyarrythmias	1 hr			

	Bradyarrthmias	1 hr			
	Valvular Heart diseases	1 hr			
	ECG Quiz	1 hr			
	Misceleneous	1 hr			
	Radiology-	**11 Hours**			
	Basics of Chest X Ray	1 hr			
	Reading Normal X Ray Chest	1 hr			
	Abnormalities on Chest X Ray – Cardiovascular system	1 hr			
	Pulmonary venous hypertension vs pulmonary arterial hypertension	1 hr			
	Chest X ray – Respiratory system	1 hr			
	Abdominal system(Chest & Abdomen X Ray)	1 hr			
	Miscelleneous X ray	1 hr			
	Basics of CT Scan	1 hr			
	Basics of MRI	2 hr			
	Basics of PET scan	1 hr			
	Drugs- Case based approach	**13 Hours**			
	Anti epileptics	1 hr			
	Cardiovascular Drugs	1 hr			
	Anti Tubercular Therapy	1 hr			
	Anti Retroviral Therapy	1 hr			
	Emergency Drugs	1 hr			
	Antiviral Drugs	1 hr			
	Drugs in respiratory system	1 hr			
	Glucocorticoids	1 hr			
	Drugs in Rheumatology	1 hr			
	Anticoagulants	1 hr			
	Inotropes and inodilators	1 hr			
	Anti hypertensives	1 hr			
	Antidiabetic drugs	1 hr			
	Interpretation of Lab Charts	**12 Hours**			
	Interpretation of Ascitic fluid analysis				
	Interpretation of Pleural fluid analysis				
	Interpretation of Cerebrospinal fluid analysis				

	Interpretation of Abnormal LFT				
	Interpretation of Anemia				
	Interpretation of thyroid function test				
	Interpretation of Peripheral blood smear				
	Interpretation of urine analysis				
	Interpretation of Fundus examination				
	Interpretation of renal function tests				
	Interpretation of Bone marrow studies				
	Interpretation of ABG				
Feedback by Faculty					
Phase III Part I					
Phase III Part II					

Assessment of Seminars

Phase	Topic	Hours	**Attempt at activity First (F) Repeat (R) Remedial (Re)**	**Decision of faculty Completed (C) Repeat (R) Remedial (Re)**	**Initial of faculty and date**
III Part I	**Seminars**	**16 Hours**			
	Clinical approach to Ascites				
	Clinical approach to Anaemia				
	Clinical approach to lymphadenopathy				
	Clinical approach to Jaundice				
	Clinical approach to chest pain				
	Clinical approach to headache				
	Clinical approach to bleeding diathesis				
	Clinical approach to Comatose patient				
	Portal hypertension and its complications				
	Pulmonary arterial hypertension				
	Pulmonary function tests				
	Thyroid function tests				
	Grave's disease				
	Micro-vascular complications of DM				
	Macro-vascular complications of DM				

	Insulin and analogues				
III Part II	Seminars	**45 hours**			
	Clinical approach to Hypertensive emergencies				
	Clinical approach to Acute myocardial infarction				
	Clinical approach to solitary Seizure				
	Clinical approach to ischemic stroke				
	Clinical approach to intracranial bleed				
	Clinical approach to Heart Failure				
	Clinical approach to Acute renal failure				
	Clinical approach to Chronic kidney disease				
	Clinical approach to hyponatremia				
	Clinical approach to potassium imbalance disorders				
	Clinical approach to disorders of calcium metabolism				
	Interpretation of ABG				
	Mixed Acid Base disorders				
	Emerging Viral Infections				
	Clinical approach to Geriatric Syndromes				
	Clinical approach to a case of Pulmonary Tuberculosis				
	Clinical approach to a case of Extra Pulmonary Tuberculosis				
	Clinical Approach to a case of PLHIV				
	Clinical approach to opportunistic infections in a case of PLHIV				
	Clinical approach to prescription of ART				
	Clinical approach to a case of Dengue				
	Clinical approach to a case of Complicated malaria				
	Recent advances in the diagnosis of tuberculosis				
	Vaccines for tuberculosis				
	Recent advances in anti retroviral drugs				
	Clinical approach to a case of Interstitial lung disease				
	Clinical approach to a case of snake bite				

	Clinical approach to a case of electric injury				
	Clinical approach to a case of acute meningitis				
	Clinical approach to a case of Chronic meningitis				
	Ageing				
	Human Microbiome				
	Clinical approach to oncological emergencies				
	Clinical approach to a case of Acute Leukemia				
	Clinical approach to a case of Chronic leukemia				
	Medicolegal, socioeconomic and ethical issues as it pertains to organ donation				
	Role of physician in community				
	Medicolegal, sociocultural, economic and ethical issues as it pertains to rights, equity and justice in access to health care				
	Medicolegal, socio-cultural and ethical issues as it pertains to confidentiality in patient care				
	Medicolegal, socio-cultural and ethical issues as it pertains to research in human subjects				
	Medicolegal, socio-cultural, professional and ethical issues as it pertains to the physician patient relationship (including fiduciary duty)				
	Documentation in health care (including correct use of medical records)				
	Use of information technology that permits appropriate patient care and continued learning				
	Understanding of the implications and the appropriate procedures and response to be followed in the event of medical errors				
	Conflicts of interest in patient care and professional				

	relationships and describe the correct response to these				
	Clinical approach to a case of				
	Clinical approach to a case of arthritis				
	Clinical approach to a case of multisystem				
	Clinical approach to a case of peripheral neuropathy				
	Clinical approach to a case of flaccid quadriparesis				
Feedback by Faculty					
Phase III Part I					
Phase III Part II					

Assessment of Theory Competencies

1	2	3	4	5	6	7	8
Competency # addressed	**Name of Activity**	**Date completed: dd-mm-yyyy**	**Attempt at activity** First or Only (F) Repeat (R) Remedial (Re)	**Rating** Below (B) expectations Meets (M) expectations Exceeds (E) expectations OR Numerical Score	**Decision of faculty** Complete d (C) Repeat (R) Remedial Re)	**Initial of faculty and date**	**Feedback Received** Initial of learner
Heart Failure							
IM1.10	Elicit, document and present an appropriate history that will establish the diagnosis, cause and severity of heart failure including presenting complaints, precipitating and exacerbating factors, risk factors						
IM1.11	Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and estimate its severity including: measurement of pulse, blood pressure and respiratory rate, jugular venous forms and pulses, peripheral pulses, conjunctiva and fundus, lung, cardiac examination including palpation and auscultation with identification of heart sounds and murmurs, abdominal distension and splenic palpation						
IM1.12	Demonstrate peripheral pulse, volume, character, quality and variation in various causes of heart failure						
IM1.13	Measure the blood pressure accurately, recognise and discuss alterations in blood						

	pressure in valvular heart disease and other causes of heart failure and cardiac tamponade						
IM1.14	Demonstrate and measure jugular venous distension						
IM1.15	Identify and describe the timing, pitch quality conduction and significance of precordial murmurs and their variations						
IM1.16	Generate a differential diagnosis based on the clinical presentation and prioritise it based on the most likely diagnosis						
IM1.17	Order and interpret diagnostic testing based on the clinical diagnosis including 12 lead ECG, Chest radiograph, blood cultures						
IM1.18	Perform and interpret a 12 lead ECG						
IM1.20	Determine the severity of valvular heart disease based on the clinical and laboratory and imaging features and determine the level of intervention required including surgery						
IM1.21	Describe and discuss and identify the clinical features of acute and subacute endocarditis, echocardiographic findings, blood culture and sensitivity and therapy						
IM1.22	Assist and demonstrate the proper technique in collecting specimen for blood culture						

IM1.23	Describe, prescribe and communicate non pharmacologic management of heart failure including sodium restriction, physical activity and limitations						
IM1.26	Develop document and present a management plan for patients with heart failure based on type of failure, underlying aetiology						
IM1.30	Administer an intramuscular injection with an appropriate explanation to the patient						
Acute Myocardial Infarction/ IHD							
IM2.6	Elicit document and present an appropriate history that includes onset evolution, presentation risk factors, family history, comorbid conditions, complications, medication, history of atherosclerosis, IHD and coronary syndromes						
IM2.7	Perform, demonstrate and document a physical examination including a vascular and cardiac examination that is appropriate for the clinical presentation						
IM2.8	Generate document and present a differential diagnosis based on the clinical presentation and prioritise based on “cannot miss”, most likely diagnosis and severity						
IM2.9	Distinguish and differentiate between stable and unstable angina and AMI based on the						

	clinical presentation						
IM2.10	Order, perform and interpret an ECG						
IM2.11	Order and interpret a Chest X-ray and markers of acute myocardial infarction						
IM2.12	Choose and interpret a lipid profile and identify the desirable lipid profile in the clinical context						
IM2.22	Perform and demonstrate in a mannequin BLS						
IM2.24	Counsel and communicate to patients with empathy lifestyle changes in atherosclerosis / post coronary syndromes						
Pneumonia							
IM3.4	Elicit document and present an appropriate history including the evolution, risk factors including immune status and occupational risk						
IM3.5	Perform, document and demonstrate a physical examination including general examination and appropriate examination of the lungs that establishes the diagnosis, complications and severity of disease						
IM3.6	Generate document and present a differential diagnosis based on the clinical features, and prioritise the diagnosis based on the presentation						

IM3.7	Order and interpret diagnostic tests based on the clinical presentation including: CBC, Chest X ray PA view, Mantoux, sputum gram stain, sputum culture and sensitivity, pleural fluid examination and culture, HIV testing and ABG						
IM3.8	Demonstrate in a mannequin and interpret results of an arterial blood gas examination						
IM3.9	Demonstrate in a mannequin and interpret results of a pleural fluid aspiration						
IM3.10	Demonstrate the correct technique in a mannequin and interpret results of a blood culture						
IM3.11	Describe and enumerate the indications for further testing including HRCT, Viral cultures, PCR and specialised testing						
IM3.12	Select, describe and prescribe based on the most likely aetiology, an appropriate empirical antimicrobial based on the pharmacology and antimicrobial spectrum						
IM3.13	Select, describe and prescribe based on culture and sensitivity appropriate empaling antimicrobial based on the pharmacology and antimicrobial spectrum.						
IM3.14	Perform and interpret a sputum gram stain and AFB						
IM3.18	Communicate and counsel patient on family on the diagnosis and therapy of						

	pneumonia						
Fever and febrile syndromes							
IM4.9	Elicit document and present a medical history that helps delineate the aetiology of fever that includes the evolution and pattern of fever, associated symptoms, immune status, comorbidities, risk factors, exposure through occupation, travel and environment and medication use						
IM4.10	Perform a systematic examination that establishes the diagnosis and severity of presentation that includes: general skin mucosal and lymph node examination, chest and abdominal examination (including examination of the liver and spleen)						
IM4.11	Generate a differential diagnosis and prioritise based on clinical features that help distinguish between infective, inflammatory, malignant and rheumatologic causes						
IM4.12	Order and interpret diagnostic tests based on the differential diagnosis including: CBC with differential, peripheral smear, urinary analysis with sediment, Chest X ray, blood and urine cultures, sputum gram stain and cultures, sputum AFB and cultures, CSF analysis, pleural and body fluid analysis, stool routine						

	and culture and QBC						
IM4.13	Perform and interpret a sputum gram stain						
IM4.14	Perform and interpret a sputum AFB						
IM4.15	Perform and interpret a malarial smear						
IM4.17	Observe and assist in the performance of a bone marrow aspiration and biopsy in a simulated environment						
IM4.19	Assist in the collection of blood and wound cultures						
IM4.20	Interpret a PPD (Mantoux)						
IM4.23	Prescribe drugs for malaria based on the species identified, prevalence of drug resistance and national programs						
IM4.24	Develop an appropriate empiric treatment plan based on the patient's clinical and immune status pending definitive diagnosis						
IM4.25	Communicate to the patient and family the diagnosis and treatment						
IM4.26	Counsel the patient on malarial prevention						
Liver diseases							
IM5.9	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 history and family history						
IM5.10	Perform a systematic examination that establishes the diagnosis and severity that includes nutritional status, mental status, jaundice, abdominal distension ascites, features of portosystemic hypertension and hepatic encephalopathy						
IM5.14	Outline a diagnostic approach to liver disease based on hyperbilirubinemia, liver function changes and hepatitis serology						
IM5.17	Enumerate the indications, precautions and counsel patients on vaccination for hepatitis						
HIV							
IM6.7	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						
IM6.8	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology for the presenting symptom						
IM6.14	Perform and interpret AFB sputum						

IM6.15	Demonstrate in a model the correct technique to perform a lumbar puncture						
IM6.19	Counsel patients on prevention of HIV transmission						
IM6.20	Communicate diagnosis, treatment plan and subsequent follow up plan to patients						
IM6.21	Communicate with patients on the importance of medication adherence						
IM6.22	Demonstrate understanding of ethical and legal issues regarding patient confidentiality and disclosure in patients with HIV						
IM6.23	Demonstrate a non-judgemental attitude to patients with HIV and to their lifestyles						
Rheumatologic problems							
IM7.11	Elicit document and present a medical history that will differentiate the aetiologies of disease						
IM7.12	Perform a systematic examination of all joints, muscle and skin that will establish the diagnosis and severity of disease						
IM7.15	Enumerate the indications for and interpret the results of : CBC, anti- CCP, RA, ANA, DNA and other tests of autoimmunity						
IM7.17	Enumerate the indications and interpret plain radiographs of joints						

IM7.18	Communicate diagnosis, treatment plan and subsequent follow up plan to patients						
IM7.20	Select, prescribe and communicate appropriate medications for relief of joint pain						
IM7.21	Select, prescribe and communicate preventive therapy for crystalline arthropathies						
IM7.22	Select, prescribe and communicate treatment option for systemic rheumatologic conditions						
IM7.24	Communicate and incorporate patient preferences in the choice of therapy						
IM7.25	Develop and communicate appropriate follow up and monitoring plans for patients with rheumatologic conditions						
IM7.26	Demonstrate an understanding of the impact of rheumatologic conditions on quality of life, well being, work and family						
Hypertension							
IM8.9	Elicit document and present a medical history that includes: duration and levels, symptoms, comorbidities, lifestyle, risk factors, family history, psychosocial and environmental factors, dietary assessment, previous and concomitant therapy						

IM8.10	Perform a systematic examination that includes : an accurate measurement of blood pressure, fundus examination, examination of vasculature and heart						
IM8.11	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology						
IM8.15	Recognise, prioritise and manage hypertensive emergencies						
IM8.16	Develop and communicate to the patient lifestyle modification including weight reduction, moderation of alcohol intake, physical activity and sodium intake						
IM8.17	Perform and interpret a 12 lead ECG						
IM8.18	Incorporate patient preferences in the management of HTN						
IM8.19	Demonstrate understanding of the impact of Hypertension on quality of life, well being, work and family						
Anemia							
IM9.3	Elicit document and present a medical history that includes symptoms, risk factors including GI bleeding, prior history, medications, menstrual history, and family history						

IM9.4	Perform a systematic examination that includes : general examination for pallor, oral examination, DOAP session of hyper dynamic circulation, lymph node and splenic examination						
IM9.5	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology						
IM9.6	Describe the appropriate diagnostic work up based on the presumed aetiology						
IM9.9	Order and interpret tests for anemia including hemogram, red cell indices, reticulocyte count, iron studies, B12 and folate						
IM9.10	Describe, perform and interpret a peripheral smear and stool occult blood						
IM9.13	Prescribe replacement therapy with iron, B12, folate						
IM9.15	Communicate the diagnosis and the treatment appropriately to patients						
IM9.16	Incorporate patient preferences in the management of anemia						
IM9.19	Assist in a blood transfusion						
IM9.20	Communicate and counsel patients with methods to prevent nutritional anemia						
Acute kidney injury and chronic renal failure							

IM10.12	Elicit document and present a medical history that will differentiate the aetiologies of disease, distinguish acute and chronic disease, identify predisposing conditions, nephrotoxic drugs and systemic causes						
IM10.13	Perform a systematic examination that establishes the diagnosis and severity including determination of volume status, presence of edema and heart failure, features of uraemia and associated systemic disease						
IM10.15	Describe the appropriate diagnostic work up based on the presumed aetiology						
IM10.17	Describe and calculate indices of renal function based on available laboratories including FENa (Fractional Excretion of Sodium) and CrCl (Creatinine Clearance)						
IM10.18	Identify the ECG findings in hyperkalemia						
IM10.20	Describe and discuss the indications to perform arterial blood gas analysis: interpret the data						
IM10.21	Describe and discuss the indications for and insert a peripheral intravenous catheter						
IM10.22	Describe and discuss the indications, demonstrate in a model and assist in the insertion of a central venous or a dialysis catheter						

IM10.23	Communicate diagnosis treatment plan and subsequent follow up plan to patients						
IM10.24	Counsel patients on a renal diet						
Diabetes Mellitus							
IM11.7	Elicit document and present a medical history that will differentiate the aetiologies of diabetes including risk factors, precipitating factors, lifestyle, nutritional history, family history, medication history, co-morbidities and target organ disease						
IM11.8	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)						
IM11.11	Order and interpret laboratory tests to diagnose diabetes and its complications including: glucoses, glucose tolerance test, glycosylated hemoglobin, urinary micro albumin, ECG, electrolytes, ABG, ketones, renal function tests and lipid profile						
IM11.12	Perform and interpret a capillary blood glucose test						
IM11.13	Perform and interpret a urinary ketone estimation with a dipstick						

IM11.19	Demonstrate and counsel patients on the correct technique to administer insulin						
IM11.20	Demonstrate to and counsel patients on the correct technique of self monitoring of blood glucoses						
Thyroid Dysfunction							
IM12.5	Elicit document and present an appropriate history that will establish the diagnosis cause of thyroid dysfunction and its severity						
IM12.6	Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and severity including systemic signs of thyrotoxicosis and hypothyroidism, palpation of the pulse for rate and rhythm abnormalities, neck palpation of the thyroid and lymph nodes and cardiovascular findings						
IM12.7	Demonstrate the correct technique to palpate the thyroid						
IM12.9	Order and interpret diagnostic testing based on the clinical diagnosis including CBC, thyroid function tests and ECG and radio iodine uptake and scan						
IM12.10	Identify atrial fibrillation, pericardial effusion and bradycardia on ECG						
IM12.11	Interpret thyroid function tests in hypo and hyperthyroidism						

IM12.14	Write and communicate to the patient appropriately a prescription for thyroxine based on age, sex, and clinical and biochemical status						
Common malignancies							
IM13.8	Perform and demonstrate a physical examination that includes an appropriate general and local examination that excludes the diagnosis, extent spread and complications of cancer						
Obesity							
IM14.6	Elicit and document and present an appropriate history that includes the natural history, dietary history, modifiable risk factors, family history, clues for secondary causes and motivation to lose weight						
IM14.7	Perform, document and demonstrate a physical examination based on the history that includes general examination, measurement of abdominal obesity, signs of secondary causes and comorbidities						
IM14.8	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely diagnosis						
IM14.9	Order and interpret diagnostic tests based on the clinical diagnosis including blood glucose, lipids, thyroid function tests etc.						

IM14.11	Communicate and counsel patient on behavioural, dietary and lifestyle modifications						
IM14.12	Demonstrate an understanding of patient's inability to adhere to lifestyle instructions and counsel them in a non - judgemental way						
GI Bleeding							
IM15.2	Enumerate, describe and discuss the evaluation and steps involved in stabilizing a patient who presents with acute volume loss and GI bleed						
IM15.4	Elicit and document and present an appropriate history that identifies the route of bleeding, quantity, grade, volume loss, duration, etiology, comorbid illnesses and risk factors						
IM15.5	Perform, demonstrate and document a physical examination based on the history that includes general examination, volume assessment and appropriate abdominal examination						
IM15.7	Demonstrate the correct technique to perform an anal and rectal examination in a mannequin or equivalent						
IM15.8	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely						

	diagnosis						
IM15.9	Choose and interpret diagnostic tests based on the clinical diagnosis including complete blood count, PT and PTT, stool examination, occult blood, liver function tests, H.pylori test.						
IM15.13	Observe cross matching and blood / blood component transfusion						
IM15.18	Counsel the family and patient in an empathetic non-judgmental manner on the diagnosis and therapeutic options						
Diarrheal diseases							
IM16.4	Elicit and document and present an appropriate history that includes the natural history, dietary history, travel , sexual history and other concomitant illnesses						
IM16.5	Perform, document and demonstrate a physical examination based on the history that includes general examination, including an appropriate abdominal examination						
IM16.7	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely diagnosis						
IM16.8	Choose and interpret diagnostic tests based on the						

	clinical diagnosis including complete blood count, and stool examination						
IM16.9	Identify common parasitic causes of diarrhea under the microscope in a stool specimen						
IM16.10	Identify vibrio cholera in a hanging drop specimen						
IM16.15	Distinguish based on the clinical presentation Crohn's disease from Ulcerative Colitis						
Headache							
IM17.2	Elicit and document and present an appropriate history including aura, precipitating aggravating and relieving factors, associated symptoms that help identify the cause of headaches						
IM17.4	Perform and demonstrate a general neurologic examination and a focused examination for signs of intracranial tension including neck signs of meningitis						
IM17.5	Generate document and present a differential diagnosis based on the clinical features, and prioritise the diagnosis based on the presentation						
IM17.6	Choose and interpret diagnostic testing based on the clinical diagnosis including imaging						
IM17.8	Demonstrate in a mannequin or equivalent the correct technique						

	for performing a lumbar puncture						
IM17.9	Interpret the CSF findings when presented with various parameters of CSF fluid analysis						
IM17.14	Counsel patients with migraine and tension headache on lifestyle changes and need for prophylactic therapy						
Cerebrovascular accident							
IM18.3	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						
IM18.5	Perform, demonstrate & document physical examination that includes general and a detailed neurologic examination as appropriate, based on the history						
IM18.6	Distinguish the lesion based on upper vs lower motor neuron, side, site and most probable nature of the lesion						
IM18.7	Describe the clinical features and distinguish, based on clinical examination, the various disorders of speech						
IM18.10	Choose and interpret the appropriate diagnostic testing in young patients with a cerebrovascular accident (CVA)						

IM18.17	Counsel patient and family about the diagnosis and therapy in an empathetic manner						
Movement disorders							
IM19.3	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 movement disorders						
IM19.4	Perform, demonstrate and document a physical examination that includes a general examination and a detailed neurologic examination using standard movement rating scales						
IM19.5	Generate document and present a differential diagnosis and prioritise based on the history and physical examination						
IM19.6	Make a clinical diagnosis regarding on the anatomical location, nature and cause of the lesion based on the clinical presentation and findings						
IM19.7	Choose and interpret diagnostic and imaging tests in the diagnosis of movement disorders						
Envenomation							
IM20.2	Describe, demonstrate in a volunteer or a mannequin and educate (to other health care workers / patients) the correct initial management of patient						

	with a snake bite in the field						
IM20.4	Elicit and document and present an appropriate history, the circumstance, time, kind of snake, evolution of symptoms in a patient with snake bite						
IM20.5	Perform a systematic examination, document and present a physical examination that includes general examination, local examination, appropriate cardiac and neurologic examination						
IM20.6	Choose and interpret the appropriate diagnostic testing in patients with snake bites						
Poisoning							
IM21.7	Counsel family members of a patient with suspected poisoning about the clinical and medico legal aspects with empathy						
Nutritional and Vitamin deficiencies							
IM23.5	Counsel and communicate to patients in a simulated environment with illness on an appropriate balanced diet						
Geriatrics							
IM24.2	Perform multidimensional geriatric assessment that includes medical, psycho-social and functional components						
Miscellaneous infections							
IM25.4	Elicit document and present a medical history that helps delineate the aetiology of these diseases that includes the						

	evolution and pattern of symptoms, risk factors, exposure through occupation and travel						
IM25.5	Perform a systematic examination that establishes the diagnosis and severity of presentation that includes: general skin, mucosal and lymph node examination, chest and abdominal examination (including examination of the liver and spleen)						
IM25.6	Generate a differential diagnosis and prioritise based on clinical features that help distinguish between infective, inflammatory, malignant and rheumatologic causes						
IM25.7	Order and interpret diagnostic tests based on the differential diagnosis including: CBC with differential, blood biochemistry, peripheral smear, urinary analysis with sediment, Chest X ray, blood and urine cultures, sputum gram stain and cultures, sputum AFB and cultures, CSF analysis, pleural and body fluid analysis, stool routine and culture and QBC						
IM25.9	Assist in the collection of blood and other specimen cultures						
IM25.11	Develop an appropriate empiric treatment plan based on the patient's clinical and immune status pending definitive diagnosis						

IM25.12	Communicate to the patient and family the diagnosis and treatment of identified infection						
IM25.13	Counsel the patient and family on prevention of various infections due to environmental issues						
The role of physician in the community							
IM26.19	Demonstrate ability to work in a team of peers and superiors						
IM26.20	Demonstrate ability to communicate to patients in a patient, respectful, non threatening, non judgemental and empathetic manner						
IM26.21	Demonstrate respect to patient privacy						
IM26.22	Demonstrate ability to maintain confidentiality in patient care						
IM26.23	Demonstrate a commitment to continued learning						
IM26.24	Demonstrate respect in relationship with patients, fellow team members, superiors and other health care workers						
IM26.25	Demonstrate responsibility and work ethics while working in the health care team						
IM26.26	Demonstrate ability to maintain required documentation in health care (including correct use of medical records)						
IM26.27	Demonstrate personal grooming that is adequate and appropriate for health care						

	responsibilities						
IM26.28	Demonstrate adequate knowledge and use of information technology that permits appropriate patient care and continued learning						
IM26.29	Communicate diagnostic and therapeutic opitons to patient and family in a simulated environment						
IM26.30	Communicate care opitons to patient and family with a terminal illness in a simulated environment						
IM26.31	Demonstrate awareness of limitations and seeks help and consultations appropriately						
IM26.32	Demonstrate appropriate respect to colleagues in the profession						
IM26.33	Demonstrate an understanding of the implications and the appropriate procedures and response to be followed in the event of medical errors						
IM26.34	Identify conflicts of interest in patient care and professional relationships and describe the correct response to these conflicts						
IM26.35	Demonstrate empathy in patient encounters						
IM26.36	Demonstrate ability to balance personal and professional priorities						

IM26.37	Demonstrate ability to manage time appropriately						
IM26.38	Demonstrate ability to form and function in appropriate professional networks						
IM26.39	Demonstrate ability to pursue and seek career advancement						
IM26.40	Demonstrate ability to follow risk management and medical error reduction practices where appropriate						
IM26.41	Demonstrate ability to work in a mentoring relationship with junior colleagues						
IM26.42	Demonstrate commitment to learning and scholarship						
IM26.48	Demonstrate altruism						
IM26.49	Administer informed consent and approriately adress patient queries to a patient being enrolled in a research protocol in a simulated environment						
Integration Anatomy							
AN20.8 Vertical integration	Identify & demonstrate palpation of femoral, popliteal, post tibial, anti tibial & dorsalis pedis blood vessels in a simulated environment						
AN20.9 Vertical integration	Identify & demonstrate Palpation of vessels (femoral, popliteal,dorsalis pedis,post tibial), Mid inguinal point, Surface projection of: femoral nerve, Saphenous opening, Sciatic, tibial, common peroneal & deep peroneal						

	nerve, great and small saphenous veins						
AN24.2 Vertical integration	Identify side, external features and relations of structures which form root of lung & bronchial tree and their clinical correlate						
AN25.7 Vertical integration	Identify structures seen on a plain x-ray chest (PA view)						
AN25.8 Vertical integration	Identify and describe in brief a barium swallow						
AN25.9 Vertical integration	Demonstrate surface marking of lines of pleural reflection, Lung borders and fissures, Trachea, Heart borders, Apex beat & Surface projection of valves of heart						
AN56.1 Vertical integration	Describe & identify various layers of meninges with its extent & modifications						
AN62.2 Vertical integration	Describe & demonstrate surfaces, sulci, gyri, poles, & functional areas of cerebral hemisphere						
AN62.6 Vertic	Describe & identify formation, branches &						

al integration	major areas of distribution of circle of Willis						
PY4.9 Vertical integration	Discuss the physiology aspects of: peptic ulcer, gastro- oesophageal reflux disease, vomiting, diarrhoea, constipation, Adynamic ileus, Hirschsprung's disease						
PY5.13	Record and interpret normal ECG in a volunteer or simulated environment						
PY5.16	Record Arterial pulse tracing using finger plethysmography in a volunteer or simulated environment						
PY11.14 Vertical integration	Demonstrate Basic Life Support in a simulated environment						
PY6.8 Vertical Integration	Demonstrate the correct techinque to perform & interpret Spirometry						
BI11.4 Vertical integration	Perform urine analysis to estimate and determine normal and abnormal constituents						
BI1.26 Vertical integration	Calculate albumin: globulin (AG) ratio and creatinine clearance						
BI1.27 Vertical integration	Calculate energy content of different food Items, identify food items with high and low glycemic index and explain the importance of these in the diet						
PA13.5	Perform, Identify and describe the peripheral						

	blood picture in anemia						
PA14.3 Vertical integration	Identify and describe the peripheral smear in microcytic anemia						
PA21.3	Differentiate platelet from clotting disorders based on the clinical and hematologic features						
PA24.3	Describe and identify the microscopic features of peptic ulcer						
PA25.6	Interpret a liver function and viral hepatitis serology panel. Distinguish obstructive from non obstructive jaundice based on clinical features and liver function tests						
PA27.8	Interpret abnormalities in cardiac function testing in acute coronary syndromes						
PA35.3 Vertical integration	Identify the etiology of meningitis based on given CSF parameters						
MI2.3	Identify the microbial agents causing Rheumatic heart disease & infective Endocarditis						
MI2.6	Identify the causative agent of malaria and filariasis						
MI3.2	Identify the common etiologic agents of diarrhea and dysentery						
MI5.3	Identify the microbial agents causing meningitis						

MI6.2	Identify the common etiologic agents of upper respiratory tract infections (Gram Stain)						
MI6.3	Identify the common etiologic agents of lower respiratory tract infections (Gram Stain & Acid fast stain).						
PH1.12	Calculate the dosage of drugs using appropriate formulae for an individual patient, including children, elderly and patient with renal dysfunction						
PH2.4	Demonstrate the correct method of calculation of drug dosage in patients including those used in special situations						
PH3.1	Write a rational, correct and legible generic prescription for a given condition and communicate the same to the patient						
PH3.3	Perform a critical evaluation of the drug promotional literature						
PH3.5	To prepare and explain a list of P-drugs for a given case/condition						
PH5.1	Communicate with the patient with empathy and ethics on all aspects of drug use						
PH5.4	Explain to the patient the relationship between cost of treatment and patient compliance						
CM5.2	Describe and demonstrate the correct method of performing a nutritional assessment of						

	individuals, families and the community by using the appropriate method						
CM5.4	Plan and recommend a suitable diet for the individuals and families based on local availability of foods and economic status, etc in a simulated environment						
CM6.2	Describe and discuss the principles and demonstrate the methods of collection, classification, analysis, interpretation and presentation of statistical data						
CM6.3	Describe, discuss and demonstrate the application of elementary statistical methods including test of significance in various study designs						
CM6.4	Enumerate, discuss and demonstrate common sampling techniques, simple statistical methods, frequency distribution, measures of central tendency and dispersion						
CM7.4	Define, calculate and interpret morbidity and mortality indicators based on given set of data						
CM7.6	Enumerate and evaluate the need of screening tests						
CM7.7	Describe and demonstrate the steps in the Investigation of an epidemic of communicable disease and describe the principles of control measures.						

FM14.2	Demonstrate the correct technique of clinical examination in a suspected case of poisoning & prepare medico-legal report in a simulated/ supervised environment						
FM14.3	Assist and demonstrate the proper technique in collecting, preserving and dispatch of the exhibits in a suspected case of poisoning, along with clinical examination .						
DR9.2	Demonstrate (and classify based on) the clinical features of leprosy including an appropriate neurologic examination						
DR10.1	Identify and classify syphilis based on the presentation and clinical manifestations						
DR10.5	Counsel in a non-judgemental and empathetic manner patients on prevention of sexually transmitted diseases						
DR10.7	Identify and differentiate based on the clinical features non-syphilitic sexually transmitted diseases (chancroid, donovanosis and LGV)						
DR11.2	Identify and distinguish the dermatologic manifestations of HIV its complications, opportunistic infections and adverse reactions						
DR12.7	Identify and distinguish fixed drug eruptions and Steven Johnson syndrome from other skin lesions						
DR16.1	Identify and distinguish skin lesions of SLE						

DR16.2	Identify and distinguish Raynaud's phenomenon						
DR17.1	Enumerate and identify the cutaneous findings in vitamin A deficiency						
AS2.1 Vertical integration	Enumerate the indications, describe the steps and demonstrate in a simulated environment basic life support in adults children and neonates						
AS2.2	Enumerate the indications, describe the steps and demonstrate in a simulated environment advanced life support in adults and children						
AS3.2 Horizontal integration	Elicit, present and document an appropriate history including medication history in a patient undergoing Surgery as it pertains to a preoperative anaesthetic evaluation						
AS3.3 Horizontal integration	Demonstrate and document an appropriate clinical examination in a patient undergoing General Surgery						
AS3.4 Horizontal integration	Choose and interpret appropriate testing for patients undergoing Surgery						
AS3.5 Horizontal integration	Determine the readiness for General Surgery in a patient based on the preoperative evaluation						
PS4.2 Horizontal integration	Elicit, describe and document clinical features of alcohol and substance use disorders						

PS4.3 Horizontal integration	Enumerate and describe the indications and interpret laboratory and other tests used in alcohol and substance abuse disorders						
PS10.2 Horizontal integration	Enumerate, elicit, describe and document clinical features in patients with somatoform, dissociative and conversion disorders						
PS10.3 Horizontal integration	Enumerate and describe the indications and interpret laboratory and other tests used in somatoform, dissociative and conversion disorders						
PS12.2 Horizontal integration	Enumerate, elicit, describe and document clinical features in patients with magnitude and etiology of psychosomatic disorders						
PS12.3 Horizontal integration	Enumerate and describe the indications and interpret laboratory and other tests of psychosomatic disorders						
PS16.4 Horizontal integration	Demonstrate family education in a patient with psychiatric disorders occurring in the elderly in a simulated environment						
PE32.3 Horizontal integration	Interpret normal Karyotype and recognize Trisomy 21						
PE28.20	Counsel the child with asthma on the correct use of inhalers in a simulated environment						
PE34.5	Able to elicit, document and present history of contact with tuberculosis in every patient						

	encounter						
PE34.6	Identify a BCG scar						
PE34.7	Interpret a Mantoux test						
PE34.8	Interpret a Chest Radiograph						
PE34.9	Interpret blood tests in the context of laboratory evidence for tuberculosis						
PE34.11	Perform AFB staining						
PE28.19	Describe the etio-pathogenesis, clinical features, diagnosis, management and prevention of asthma in children						
PM4.5 Horizontal integration	Demonstrate correct assessment of muscle strength and range of movements						
PM6.1 Horizontal integration	Perform and demonstrate a clinical examination of sensory and motor deficits of peripheral nerve						
CT1.5	Elicit, document and present an appropriate medical history that includes risk factor, contacts, symptoms including cough and fever CNS and other manifestations						
CT1.6	Demonstrate and perform a systematic examination that establishes the diagnosis based on the clinical presentation that includes a a) general examination, b) examination of						

	the chest and lung including loss of volume, mediastinal shift, percussion and auscultation (including DOAP session of lung sounds and added sounds) c) examination of the lymphatic system and d) relevant CNS examination						
CT1.7	Perform and interpret a PPD (mantoux) and describe and discuss the indications and pitfalls of the test						
CT1.10	Perform and interpret an AFB stain						
CT1.11	Assist in the performance, outline the correct tests that require to be performed and interpret the results of a pleural fluid aspiration						
CT1.15	Prescribe an appropriate antituberculosis regimen based on the location of disease, smear positivity and negativity and co- morbidities based on current national guidelines including directly observed tuberculosis therapy (DOTS)						
CT1.17	Define criteria for the cure of Tuberculosis; describe and recognise the features of drug resistant tuberculosis, prevention and therapeutic regimens						
CT1.18	Educate health care workers on National Program of Tuberculosis and administering and monitoring the DOTS program						
CT1.19	Communicate with patients and family in an empathetic manner about the diagnosis, therapy						

CT2.8	Elicit document and present a medical history that will differentiate the aetiologies of obstructive airway disease, severity and precipitants						
CT2.10	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology						
CT2.11	Describe, discuss and interpret pulmonary function tests						
CT2.12	Perform and interpret peak expiratory flow rate						
CT2.13	Describe the appropriate diagnostic work up based on the presumed aetiology						
CT2.14	Enumerate the indications for and interpret the results of : pulse oximetry, ABG, Chest Radiograph						
CT2.15	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology						
CT2.18	Develop a therapeutic plan including use of bronchodilators and inhaled corticosteroids						
CT2.19	Develop a management plan for acute exacerbations including bronchodilators, systemic steroids, antimicrobial therapy						
CT2.21	Describe discuss and counsel patients appropriately on smoking cessation						
CT2.22	Demonstrate and counsel patient on the correct use of inhalers						

CT2.23	Communicate diagnosis treatment plan and subsequent follow up plan to patients						
CT2.9	Perform a systematic examination that establishes the diagnosis and severity that includes measurement of respiratory rate, level of respiratory distress, effort tolerance, breath sounds, added sounds, identification of signs of consolidation pleural effusion and pneumothorax						
DR5.2	Identify and differentiate scabies from other lesions						
DR6.2	Identify and differentiate pediculosis from other skin lesions						
DR17.1	Enumerate and identify the cutaneous findings in vitamin A deficiency						
AS2.1	Enumerate the indications, describe the steps and demonstrate in a simulated environment basic life support in adults children and neonates						
PS14.2	Enumerate, elicit, describe and document clinical features in patients with psychiatric disorders occurring in childhood and adolescence						
PS14.4	Demonstrate family education in a patient with psychiatric disorders occurring in childhood and adolescence in a simulated environment						
PS15.3	Elicit and document a history and clinical examination and choose appropriate						

	investigations in a patient with mental retardation						
OG18.2	Demonstrate the steps of neonatal resuscitation in a simulated environment						
PM3.4	Demonstrate spasticity, rigidity and dystonia in children with cerebral palsy						
PS1.1	Establish rapport and empathy with patients						
PS1.3	Demonstrate breaking of bad news in a simulated environment						
PS1.4	Describe and demonstrate the importance of confidentiality in patient encounters						
PS3.3	Elicit, present and document a history in patients presenting with a mental disorder						
PS3.4	Describe the importance of establishing rapport with patients						
PS3.5	Perform, demonstrate and document a minimental examination						
PS3.9	Describe the steps and demonstrate in a simulated environment family education in patients with organic psychiatric disorders						
PS4.2	Elicit, describe and document clinical features of alcohol and substance use disorders						
PS4.3	Enumerate and describe the indications and interpret laboratory and other tests used in alcohol and substance abuse						

	disorders						
PS4.5	Demonstrate family education in a patient with alcohol and substance abuse in a simulated environment						
PS5.2	Enumerate, elicit, describe and document clinical features, positive s						
PS5.4	Demonstrate family education in a patient with schizophrenia in a simulated environment						
PS6.2	Enumerate, elicit, describe and document clinical features in patients with depression						
PS6.3	Enumerate and describe the indications and interpret laboratory and other tests used in depression						
PS6.5	Demonstrate family education in a patient with depression in a simulated environment						
PS7.2	Enumerate, elicit, describe and document clinical features in patients with bipolar disorders						
PS7.3	Enumerate and describe the indications and interpret laboratory and other tests used in bipolar disorders						
PS7.5	Demonstrate family education in a patient with bipolar disorders in a simulated environment						

PS8.2	Enumerate, elicit, describe and document clinical features in patients with anxiety disorders						
PS8.3	Enumerate and describe the indications and interpret laboratory and other tests used in anxiety disorders						
PS8.5	Demonstrate family education in a patient with anxiety disorders in a simulated environment						
PS9.2	Enumerate, elicit, describe and document clinical features in patients with stress related disorders						
PS9.3	Enumerate and describe the indications and interpret laboratory and other tests used in stress related disorders						
PS9.5	Demonstrate family education in a patient with stress related disorders in a simulated environment						
PS10.2	Enumerate, elicit, describe and document clinical features in patients with somatoform, dissociative and conversion disorders						
PS10.3	Enumerate and describe the indications and interpret laboratory and other tests used in somatoform, dissociative and conversion disorders						
PS10.5	Demonstrate family education in a patient with somatoform, dissociative and conversion disorders in a						

	simulated environment						
PS11.2	Enumerate, elicit, describe and document clinical features in patients with personality disorders						
PS11.3	Enumerate and describe the indications and interpret laboratory and other tests used in personality disorders						
PS11.5	Demonstrate family education in a patient with personality disorders in a simulated environment						
PS12.2	Enumerate, elicit, describe and document clinical features in patients with magnitude and etiology of psychosomatic disorders						
PS12.3	Enumerate and describe the indications and interpret laboratory and other tests of psychosomatic disorders						
PS12.5	Demonstrate family education in a patient with psychosomatic disorders in a simulated environment						
PS13.2	Enumerate, elicit, describe and document clinical features in patients with magnitude and etiology of psychosexual and gender identity disorders						
PS13.3	Enumerate and describe the indications and interpret laboratory and other tests used in psychosexual and gender identity disorders						

PS13.5	Demonstrate family education in a patient with psychosexual and gender identity disorders in a simulated environment						
PS14.2	Enumerate, elicit, describe and document clinical features in patients with psychiatric disorders occurring in childhood and adolescence						
PS14.4	Demonstrate family education in a patient with psychiatric disorders occurring in childhood and adolescence in a simulated environment						
PS15.3	Elicit and document a history and clinical examination and choose appropriate investigations in a patient with mental retardation						
PS16.4	Demonstrate family education in a patient with psychiatric disorders occurring in the elderly in a simulated environment						
PH5.6	Demonstrate ability to educate public & patients about various aspects of drug use including drug dependence and OTC drugs.						
IM17.14	Counsel patients with migraine and tension headache on lifestyle changes and need for prophylactic therapy						
IM24.2	Perform multidimensional geriatric assessment that includes medical,						

	psycho-social and functional components						
DR1.2	Identify and grade the various common types of acne						
DR3.1	Identify and distinguish psoriatic lesions from other causes						
DR3.2	Demonstrate the grattage test						
DR4.1	Identify and distinguish lichen planus lesions from other causes						
DR5.2	Identify and differentiate scabies from other lesions in adults and children						
DR6.2	Identify and differentiate pediculosis from other skin lesions in adults and children						
DR7.2	Identify Candida species in fungal scrapings and KOH mount						
DR8.2	Identify and distinguish herpes simplex and herpes labialis from other skin lesions						
DR8.3	Identify and distinguish herpes zoster and varicella from other skin lesions						
DR8.4	Identify and distinguish viral warts from other skin lesions						
DR8.5	Identify and distinguish molluscum contagiosum from other skin lesions						
DR8.6	Enumerate the indications, describe the procedure and perform a Tzanck smear						
DR9.2	Demonstrate (and classify based on) the clinical features of leprosy including an						

	appropriate neurologic examination						
DR10.1	Identify and classify syphilis based on the presentation and clinical manifestations						
DR10.2	Identify spirochete in a dark ground microscopy						
DR10.5	Counsel in a non-judgemental and empathetic manner patients on prevention of sexually transmitted disease						

General Medicine

Subject: General Medicine **Third Year MBBS**

Sub Item: Theory lectures/ Clinical postings/Tutorials/seminars/self directed learning/ Electives

Final Summary

Sr. No	Description	Dates		Attendance percentage	Status	Signature of Teacher
		From	To		Complete/ Incomplete	
1	Theory lectures					
2	**Clinical postings**					
3	AETCOM Module					
4.	Electives					
5	Vertical Integraon					

6	Extracurricular activities					
7	Sports /Physical Education					