Study Guide Medicine & Allied, Final Year MBBS 2023

Rawalpindi Medical University, Rawalpindi

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As student approach final year Medicine MBBS program, it is not only a culmination of academic journey but also a stepping stone towards becoming a compassionate and competent physician. This study guide and assessment document aim to support in this transformative period, helping to consolidate medical knowledge, refine clinical skills, and excel in final examinations. Final year of Medicine (MBBS) program is crucial as it prepares to transition from being a student to a competent medical professional. To help navigate through this critical period and ensure success, this comprehensive study guide and assessment document has been developed. Sections of the study guide have been meticulously curated to align with curriculum, ensuring that all the necessary content are covered. Assessment is an integral part of educational process. It is essential to evaluate understanding and gauge readiness for the final examinations.

The study guide gives an overview of course topics, learning objectives, and methodologies in relation to the course content. The assessment methodology tailored to intuitional strategy is provided in details. This study guide has been designed keeping in view of related PMC guidelines. It is to be noted that this document is undergoing periodic review and modifications.

Professor Muhammad Khurram

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Medicine And Allied Clerkship – Overview, Duration, and timings

Clinical Medicine Rotation of Final year MBBS at Rawalpindi Medical University Rawalpindi (Clerkship) comprises following;

- Three months (12 weeks) duration.
- It includes; 1) Large Group interactive Session **(LGIS)** of one hour from Monday to Saturday, and 2) clinical rotation 9 am to 2pm Monday to Thursday and Saturday, 9am to 12pm on Friday at respective Units.
- Each Student during the Clerkship rotates to;
    - Two Medical Units At each Medical Unit he/she stays for four week.
    - In Cardiology, Dermatology, Psychiatry, and Radiology Units for one week respectively.
- From 2 to 5pm on minimum 2 days/week student attend Emergency/Ward of respective unit and shadows House Officers and Post Graduate Trainees

Medicine Clerkship- Hours

	Schedule Duration Monthly	**Schedule Duration** Total 3 months module
Interactive LGIS	8-9am, 5 days a week= 20 hour	60 hour
CPC	8-9am, once a week= 4 hours	12 hours
Clinical Clerkship in Wards	9am-2pm, 5 days a week= 100 hours 9am-12pm Friday= 12hours	300 hours 36 hours
Shadowing Resident in Emergency/Ward- Evening hours	3 hours, 2 times a week= 24 hours	72 hours
	160	**480 hours**

PMC minimum requirement for Final Year MBBS 360 hours

Structured Training Program

Section- I
Large Group Interactive Sessions Details (LGIS)

Details of Days, Teacher, Specialty, Topic , Specific Learning Objectives (SLO), Mode of Teaching, and Level of Cognition

1st WEEK											
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
1	MONDAY	PROF DR MUHAMMAD KHURRAM	PULMONOLOGY	OBSTRUCTIVE LUNG DISEASES (ASTHMA , COPD)	At the end of one hour lecture, students will be able to: a) Describe etiopathogenesis b) Discuss clinical feature and classify c) Name the complications d) Outline Management plan	LGIS/PPT			✓	**A3**	See assessment section
2	TUESDAY	PROF DR MUHAMMAD KHURRAM	PULMONOLOGY	PNEUMONIA (CAP, HAP)	At the end of one hour lecture, student will be able to: a) Describe etiopathogenesis b) Discuss clinical feature, severity scores and classify c) Name the complications d) Outline Management plan	LGIS/PPT			✓	**A3**	See assessment section
	WEDNESDAY	CPC									
3	THURSDAY	PROF DR MUHAMMAD KHURRAM	PULMONOLOGY	TUBERCULOSIS (Pulmonary, Extrapulmonary, Drug resistant TB)	At the end of one hour lecture, students will be able to: a) Discuss epidemiology and etiopathogenesis b) Describe clinical feature, classification &investigations c) Outline Management plan including side effects of ATT d) Explain methods for control and Prevention	LGIS/PPT			✓	**A3**	See assessment section
4	FRIDAY	PROF DR MUHAMMAD KHURRAM	PULMONOLOGY	BRONCHOGENIC MALIGNANCY	At the end of one hour lecture, students will be able to: a) Describe etiopathogenesis b) Discuss clinical feature and stage the disease c) Name the complications d) Explain Prognosis	LGIS/PPT		✓		**A3**	See assessment section

5	SATURDAY	PROF DR MUHAMMAD KHURRAM	PULMONOLOGY	DPLD (IIP, Sarcoidosis)	At the end of one hour lecture, students will be able to: a) Describe etiopathogenesis b) Discuss clinical feature, classification &investigations c) Explain complications of disease	LGIS/PPT		✓		**A3**	See assessment section
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
2nd WEEK											
6	MONDAY	PROF DR MUHAMMAD KHURRAM	PULMONOLOGY	RESPIRATORY FAILURE,	At the end of one hour lecture, students will be able to: a) Describe causes of Respiratory failure b) Discuss types of Respiratory failure c) Explain ABGs results d) Outline Management plan	LGIS/PPT			✓	**A3**	See assessment section
7	TUESDAY	PROF DR MUHAMMAD ALI KHALID	HEMATOLOGY	ANEMIAS (Macrocytic, Microcytic and Normocytic)	At the end of one hour lecture, student will be able to: a) Describe etiopathogenesis b) Discuss clinical feature c) Classify Anemia based on etiology and Morphology d) Outline Management Plan	LGIS/PPT			✓	**A3**	See assessment section
	WEDNESDAY	CPC									
8	THURSDAY	DR LUBNA MERAJ	HEMATOLOGY	HEMATOLOGICAL MALIGNANCIES (Myeloproliferative, Lymphoproliferative disorders)	At the end of one hour lecture, students will be able to: a) Describe epidemiology and etiopathogenesis b) Discuss classification and clinical features c) Outline Management Plan d) Explain Prognosis of each type	LGIS/PPT			✓	**A3**	See assessment section

9	FRIDAY	DR LUBNA MERAJ	HEMATOLOGY	BLEEDING DISORDERS (ITP, Hemophilia A & B)	At the end of one hour lecture, students will be able to: a) Explain genetics of disease b) Describe clinical features and investigations c) Outline management plan and discuss prognosis /complications	LGIS/PPT			✓	**A3**	See assessment section
10	SATURDAY	DR LUBNA MERAJ	HEMATOLOGY	THROMBOTIC DISRODERS(DVT, Pulmonary Embolism)	At the end of one hour lecture, students will be able to: a) Discuss predisposing factors b) Explain causes (Inherited and Acquired) c) Describe clinical features, scoring system and Investigation d) outline management points and prophylaxis of disease	LGIS/PPT			✓	**A3**	See assessment section
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
3rd WEEK											
11	MONDAY	DR LUBNA MERAJ	HEMATOLOGY	BLOOD TRANFUSION/ HSCT	At the end of one hour lecture, students will be able to: a) Describe types of Blood component and their use b) Explain steps to ensure safe transfusion of blood products c) Name complications of transfusion d) Understand HSCT	LGIS/PPT/ Video		✓		**A3**	See assessment section
12	TUESDAY	PROF DR SHAHZAD MANZOOR	POISONING	GENERAL APPROACH / ORGANOPHOSPHATE POISONING / WHEAT PILL POISONING	At the end of one hour lecture, students will be able to: a) Understand how to evaluate poisoned patient b) Explain Mechanism of Wheat pill and OP poisoning c) Describe clinical features of individual type of poisoning d) Outline management plan and explain complications	LGIS/PPT			✓	**A3**	See assessment section
	WEDNESDAY	CPC									

13	THURSDAY	PROF DR SHAHZAD MANZOOR	POISONING	CORROSIVE INTAKE / CO POISONING	At the end of one hour lecture, students will be able to: a) Explain Mechanism of toxicity b) Describe clinical features of individual type of poisoning c) Outline Management plan d) Discuss complications of each type of poisoning	LGIS/PPT			✓	**A3**	See assessment section
14	FRIDAY	PROF DR SHAHZAD MANZOOR	POISONING	OVERDOSE OF PHARMACEUTICAL AGENTS (CVS, Antipsychotic, Antidepressants, Ant diabetic drugs)	At the end of one hour lecture, students will be able to: a) Explain Mechanism of toxicity b) Describe features of individual type of drug overdose c) Outline Management plan d) Discuss complications	LGIS/PPT			✓	**A3**	See assessment section
15	SATURDAY	DR SHAHZAD MANZOOR	ENVENOMATION	SNAKE BITE	At the end of one hour lecture, students will be able to: a) Understand various types of snakebites b) Differentiate Neurotoxic and vasculotoxic snakebites c) Discuss clinical features d) Outline management points	LGIS/PPT/ Video PT			✓	**A3**	See assessment section
16	MONDAY	DR SAIMA AMBREEN	ENDOCRINOLOGY	DIABETES MELLITUS	At the end of one hour lecture, students will be able to describe: · Diagnostic criteria for diabetes mellitus(WHO) · Different types of diabetes mellitus · Pathogenesis of diabetes mellitus (type 1 and2) · Symptoms and signs of diabetes mellitus · Management of diabetes mellitus (type1 and2) · Diet and life style modification in diabetes · Anti-diabetic drugs including oral hypoglycemic along with modes of action, and insulin · Side effects of oral hypoglycemic and insulin · Chronic complications of diabetes mellitus	LGIS/ PPT			✓	**A3**	See assessment section

					· Gestational Diabetes Mellitus						
17	TUESDAY	DR SAIMA AMBREEN	ENDOCRINOLOGY	DIABETIC EMERGENCIES (DKA, HHS, Hypoglycemia)	At the end of one hour lecture, students will be able to: a) Explain Etiopathogenesis of diabetic emergencies b) Describe clinical features and investigations to confirm diagnosis and enlist complications c) Outline management plan of each emergency condition	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
	WEDNESDAY	CPC									
18	THURSDAY	DR SAIMA AMBREEN	ENDOCRINOLOGY	THYROID &PARATHROID DISORDERS (Grave's Disease, Hashiomoto thyroiditis, Myxedema coma, Thyrotoxic crises)	At the end of one hour lecture, students will be able to: a) Describe Pathophysiology of thyroid and Parathyroid diseases b) Discuss Classification and clinical feature of each disease c) Outline basic management points of individual diseases d) Explain management of thyroid disorders in pregnancy	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
19	FRIDAY	DR SAIMA AMBREEN	ENDOCRINOLOGY	ADRENAL DISORDERS (Cushing Syndrome, Addison's Disease, Conn's Syndrome, Pheochromocytoma)	At the end of one hour lecture, students will be able to: a) Explain Etiopathogenesis of each condition b) Discuss clinical features and investigations to confirm diagnosis c) Outline principles of management of adrenal disorders d) Discuss emergency management of addisonian crises	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section

20	SATURDAY	DR SAIMA AMBREEN	ENDOCRINOLOGY	PITUTIARY DISORDERS (Acromegaly, Diabetes insipidus, SIADH)	At the end of one hour lecture, students will be able to: a) Explain Etiopathogenesis of each condition b) Explain clinical features and investigations to confirm diagnosis c) Outline management plan of each disorder and discuss Complications	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
5th WEEK											
21	MONDAY	DR M MUJEEB KHAN	**DID**	RESPIRATORY VIRAL INFECTIONS (Influenza, COVID-19)	At the end of one hour lecture, students will be able to: a) Explain Etiopathogenesis of each disease b) Discuss clinical features and investigations to confirm diagnosis c) Outline Management plan and steps for prevention of disease including immunization	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
22	TUESDAY	DR MMUJEEB KHAN	DID	VIRAL INFECTIONS (Dengue, Viral Hemorrhagic Fever)	At the end of one hour lecture, students will be able to: a) Explain Etiopathogenesis of each condition b) Explain clinical features and investigations to confirm diagnosis c) Outline management plan of each disorder and discuss Complications	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
	WEDNESDAY	CPC									

23	THURSDAY	DR M MUJEEB KHAN	DID	BACTERIAL & PROTOZOAL INFECTIONS (Enteric fever, Brucellosis, Malaria, Amoebiasis)	At the end of one hour lecture, students will be able to: a) Describe Etiopathogenesis and clinical features of each disease b) Discuss appropriate investigations to confirm diagnosis c) Outline Management plan of each disease individually d) Explain effective preventive measures against each disease	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
24	FRIDAY	DR M MUJEEB KHAN	DID	PUO	At the end of one hour lecture, students will be able to: a) Define and classify PUO b) Enumerate causes of PUO c) Describe investigations to reach underlying cause	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
25	SATURDAY	DR M MUNIR SLATCH	PSYCHIATRY	DEPRESSION	At the end of one hour lecture, students will be able to: a) Define depression keeping in view ICD 11 criteria for depressive illness b) Discuss differential diagnosis and Prognosis of depressive patients c) Outline a management plan of a depressed patient keeping in view etiological, psychopathological and epidemiological factors. d) identify the risk of self-harm / suicide in a depressed patients	LGIS/ PPT/ Case Vignette			✓	**A3**	See assessment section
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
6th Week											

26	MONDAY	DR M MUNIR SLATCH	PSYCHIATRY	BIPOLAR AFFECTIVE DISORDER	At the end of one hour lecture, students will be able to: a) Define bipolar keeping in view ICD 10 criteria for Bipolar Affective Disorder(BAD) b) Discuss differential diagnosis and Prognosis of BAD patients c) Outline a management plan of a BAD patient keeping in view etiological, psychopathological and epidemiological factors. d) Identify the risk factors in violent patients. Devise a management plan for these patients.	LGIS/ PPT/ Case Vignette			✓	**A3**	See assessment section
27	TUESDAY	DR M MUNIR SLATCH	PSYCHIATRY	SUBSTANCE ABUSE	At the end of one hour lecture, students will be able to: a) Understand different classes of substances of abuse b) define abuse, harmful use, dependence, tolerance, intoxication and withdrawal of different substances of abuse c) Describe symptoms and signs of a patient of substance use. d) Explain Motivational interview e) Outline a comprehensive management plan based on recent advances	LGIS / PPT			✓	**A3**	See assessment section
	WEDNESDAY	CPC									
28	THURSDAY	DR M MUNIR SLATCH	PSYCHIATRY	DEMENTIA	At the end of one hour lecture, students will be able to: a) Define Dementia keeping in view ICD 11 criteria for Dementia. b) Classify dementia based on ICD-11 diagnostic criteria c) Describe etiology and pathophysiology of dementia d) Discuss differential diagnosis and Prognosis of dementia patients. e) outline a comprehensive management plan	LGIS/ PPT/ Case Vignette			✓	**A3**	See assessment section

29	SATURDAY	DR WAQAS AP NEUROLOGY	NEUROLOGY	STROKE (Ischemic Stroke, ICB, SAH)	At the end of one hour lecture, students will be able to: a) Describe Etiology and pathophysiology of disease b) Explain risk factors and Clinical features of stroke c) Discuss appropriate investigations to reach diagnosis d) Outline management plan & recent advances	LGIS/ PPT			✓	**A3**	See assessment section
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
7th WEEK											
30	MONDAY	DR WAQAS AP NEUROLOGY	NEUROLOGY	HEADACHE SYNDROMES (Migraine, Tension Headache, Cluster Headache)	At the end of one hour lecture, students will be able to: a) Classify headache and clinical features of each type b) Discuss differentiating points of each type of headache c) Describe indications of Ct scan in Headache d) Outline Principles of Management and complications	LGIS/ PPT/ Case Vignette			✓	**A3**	See assessment section
31	TUESDAY	DR WAQAS AP NEUROLOGY	NEUROLOGY	EPILEPSY	At the end of one hour lecture, students will be able to: • Explain types of epilepsies • Describe Etiology, pathophysiology, clinical features, and investigations • Outline treatment of Status epilepticus • understand indications, contraindications and side effects of different antiepileptic drugs • Know how to Withdraw antiepileptic therapy • understand the management of Epilepsy in pregnancy	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
	WEDNESDAY	CPC									

32	THURSDAY	DR WAQAS AP NEUROLOGY	NEUROLOGY	CNS INFECTIONS (Meningitis, Encephalitis) / Multiple Sclerosis	At the end of one hour lecture, students will be able to explain: a) Etiology and Pathophysiology of each disease b) Clinical feature and investigations to confirm diagnosis c) Macdonald's criteria for Multiple sclerosis d) Management plan & enlist complications	LGIS/PPT			✓	**A3**	See assessment section
33	FRIDAY	DR WAQAS AP NEUROLOGY	NEUROLOGY	NEUROPATHY / PARAPLEGIA (GBS)	At the end of one hour lecture, students will be able to explain: a) Etiology and Pathophysiology of each disease b) Clinical features and investigations c) Outline Management plan of each disease d) Complications and Prognosis of disease	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
34	SATURDAY	DR WAQAS AP NEUROLOGY	NEUROLOGY	DISORDERS OF NMJ (Myasthenia Gravis, LES) / MYOPATHIES	At the end of one hour lecture, students will be able to explain: a) Etiology and Pathophysiology b) Clinical features and diagnostic investigations of each c) Outline Management plan including recent advances d) Genetic component of disease and prognosis	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
8th week											
35	MONDAY	DR TANVEER HUSSAIN (AP)	GASTROENTEROLOGY / HEPATOLOGY	DISEASES OF GIT (GERD, APD, Achalasia,)	At the end of one hour lecture, students will be able to explain: a) Etiopathogenesis and clinical features of each disease b) Specific Investigations of each disease c) Treatment plan of each disease d) Complications of each disease	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section

36	TUESDAY	DR TANVEER HUSSAIN (AP)	GASTROENTEROLOGY / HEPATOLOGY	HEPATITIS (Viral Hepatitis, Autoimmune Hepatitis)	At the end of one hour lecture, students will be able to learn: a) Etiology and pathogenesis of each type of hepatitis b) Risk factors, transmission & Clinical features of hepatitis c) Investigations and interpretation of serology panel in Hepatitis d) Principles of management of both viral and autoimmune types e) Steps to prevent spread of hepatitis including immunization	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
	WEDNESDAY	CPC									
37	THURSDAY	DR TANVEER HUSSAIN (AP)	GASTROENTEROLOGY / HEPATOLOGY	CIRRHOSIS AND Its COMPLICATIONS (Ascites, HRS, HE, SBP, HCC, UGI Bleeding etc)	At the end of one hour lecture, students will be able to: a) Explain causes and pathogenesis of cirrhosis b) Describe Clinical features, scoring and investigations in cirrhosis c) discuss various complications of cirrhosis d) outline Management of cirrhosis and its complications e) describe Child Pugh scoring system	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
38	FRIDAY	DR TANVEER HUSSAIN (AP)	GASTROENTEROLOGY / HEPATOLOGY	FULMINANT HEPATIC FAILURE / PANCREATITIS	At the end of one hour lecture, students will be able to explain: a) Etiopathogenesis and clinical features of each disease b) Clinical features and appropriate investigations c) Severity scoring system for pancreatitis d) Principles of management of both diseases e) Complications and long term prognosis of disease	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section
39	SATURDAY	DR TANVEER HUSSAIN (AP)	GASTROENTEROLOGY / HEPATOLOGY	LIVER DISEASE AND PREGNANCY	At the end of one hour lecture, students will be able to know: a) Causes of Jaundice in Pregnancy b) Clinical features and investigations of different liver disorder in pregnancy c) Outline management points and outcome of each disorder	LGIS/PPT/ Case Vignette			✓	**A3**	See assessment section

Sr #	Days	Teacher	Specialty	Topic	Specific Learning Objectives (SLO)	MOT/MIT	Level of Cognition			Affective	MOA
							C1	C2	C3		
9th WEEK											
40	MONDAY	DR NOREEN CHAUDHRY (AP)	NEPHROLOGY	GLOMERULONEPHRITIS	At the end of one hour lecture, students will be able to : a) explain Etiopathogenesis of disease b) Classify and describe clinical features of GN c) understand Investigations to confirm type of Glomerulonephritis d) outline management and discuss complications	LGIS/PPT Case Vignette			✓	**A3**	See assessment section
41	TUESDAY	DR NOREEN CHAUDHRY	NEPHROLOGY	ELECTROLYTES & ACID-BASE IMBALANCE (Hyponatremia, Hypernatremia, Hypokalemia, Hyperkalemia, Acidosis, Alkalosis)	At the end of one hour lecture, students will be able to describe a) Etiopathogenesis of disease b) relevant Clinical features and investigations c) outline Management steps of each abnormality individually and complications	LGIS/PPT Case Vignette			✓	**A3**	See assessment section
	WEDNESDAY	CPC									
42	THURSDAY	DR NOREEN CHAUDHRY	NEPHROLOGY	KIDNEY DISORDER IN SYSTEMIC DISEASES (Lupus Nephritis, DM, Systemic Vasculitis) / AKI	At the end of one hour lecture, students will be able to describe : a) Etiopathogenesis of each disease separately b) Clinical features and investigations to confirm diagnosis c) Basic management points of each disease d) Complications of Acute kidney injury and their management, indications of dialysis in ARF	LGIS/PPT Case Vignette			✓	**A3**	See assessment section
43	FRIDAY	DR NOREEN CHAUDHRY	NEPHROLOGY	CHRONIC KIDNEY DISEASE	At the end of one hour lecture, students will be able to a) discuss Etiology and pathophysiology of disease b) describe Clinical features of CKD c) explain Investigations to confirm CKD and underlying cause d) outline management of CKD e) describe Complications of CKD and their management, Indications of Dialysis in CKD	LGIS/PPT Case Vignette			✓	**A3**	See assessment section

44	SATURDAY	DR NOREEN CHAUDHRY	NEPHROLOGY	RENAL REPLACEMENT THERAPY (Hemodialysis, Hemofiltration, Peritoneal dialysis, Renal transplantation)	At the end of one hour lecture, students will be able to explain: a) Indications of Renal replacement therapy b) Pros and Cons of each type of therapy c) Complications and their management	LGIS/PPT Case Vignette			✓	**A3**	See assessment section
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
10th WEEK											
45	MONDAY	DR MUHAMMAD ASAD (AP)	CARDIOLOGY	CAD /HEART FAILURE	At the end of one hour lecture, students will be able to: a) Explain Clinical Anatomy and etiopathogenesis b) describe clinical features and classify HF c) outline Management points and complications d) Discuss Prognosis of both conditions	LGIS/PPT			✓	**A3**	See assessment section
46	TUESDAY	DR MUHAMMAD ASAD (AP)	CARDIOLOGY	HYPERTENSION	At the end of one hour lecture, students will be able to: a) Define criteria, types and classification b) Explain clinical features and complications c) Outline Principles of management d) understand key differences in management of Hypertension in pregnancy	LGIS/PPT			✓	**A3**	See assessment section
	WEDNESDAY	CPC									
47	THURSDAY	DR MUHAMMAD ASAD (AP)	CARDIOLOGY	VALVULAR HEART DISEASE (Including RF & IE)	To enable students understand pathogenesis, clinical features, Investigations, treatment and complications of; a) Revisit etiology & pathophysiology of common VHDs b) Describe clinical feature & investigations of VHD c) Explain features, criteria and management of Rheumatic fever c) Explain features, criteria and management of Infective Endocarditis	LGIS/PPT			✓	**A3**	See assessment section

48	FRIDAY	DR MUHAMMAD ASAD (AP)	CARDIOLOGY	CARDIAC ARRYTHMIAS (TACHYARRYTHMIAS, BRADYARRYHTMIAS)	At the end of one hour lecture, students will be able to: a) Outline etiopathogenesis of Arrhythmias b) Discuss clinical and ECG features of each type of arrhythmia c) Outline principles of management (of both shockable and non shockable rhythm) and complications of arrhythmias d) understand side effects of common antiarrhythmic drugs	LGIS/PPT/ Video PT			✓	**A3**	See assessment section
49	SATURDAY	DR MUHAMMAD ASAD (AP)	CARDIOLOGY	BASIC LIFE SUPPORT (BLS)	At the end of one hour lecture, students will be able to: a) describe Components of BLS b) understand algorithm of BLS	LGIS/PPT/ Video PT			✓	**A3**	See assessment section
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
11th WEEK											
50	MONDAY	DR NASIR KHAN (HOD)	RADIOLOGY	CLINICAL RADIOLOGY, GENERAL PRINCIPLES	At the end of one hour lecture, student will be able to: • understand imaging modalities and categorize different densities including bone, fat, soft tissue, metal and air • understand Imaging algorithm for common diagnostic scenarios with emphasis on indications and interpretation • Match Scenarios in which radiology is particularly important for diagnosis, management and delivery of patient care • Explain Benefits and limitations of different radiologic modalities including plain film, CT, MR, Ultrasound, Nuclear Medicine • understand risks associated with radiation exposure specifically in pregnancy • Integrate imaging with clinical information	LGIS/PPT/ Video PT			✓	**A3**	See assessment section

51	TUESDAY	DR NASIR KHAN (HOD)	RADIOLOGY	GASTROINTESTINAL/RHEUMATOLOGY/HEMATOLOGY ILLNESS RELATED RADIOLOGY	At the end of one hour lecture, students will be able to explain identification points for • free intraabdominal air on plain film and effect of patient positioning on sensitivity of detection • Hepatosplenomegaly on ultrasound abdomen in various infective/inflammatory diseases • Free fluid in peritoneal cavity on ultrasound • Explain bone density on x-rays and findings in osteoporosis /osteomalacia • Describe Skeletal manifestations of Thalassemia, sickle cell anemia, Hemolytic Anemias • Differentiate between osteoarthritis and Rheumatoid Arthritis on joint x-rays • Explain skeletal manifestations of connective tissue Disorders	LGIS/PPT/ Video PT			✓	**A3**	See assessment section
	WEDNESDAY	CPC									
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
52	THURSDAY	DR NASIR KHAN (HOD)	RADIOLOGY	RESPIRATORY AND CARDIOVASCULAR RADIOLOGY	At the end of one hour lecture, students will be able to explain: • Systematic search pattern for interpreting chest x-rays —ABCDE Basics • Consolidations and brief introduction of differential diagnosis for appearance of opacity on CXR and narrow down pathologies resulting in opacification. • Normal positioning of chest leads, Endotracheal tube ,chest tube, tracheostomy, central venous pressure line on x rays • Pleural effusion in CXR on supine, upright and decubitus films • COVID 19 presentation on chest x ray with progressive stages • Pulmonary tuberculosis findings on chest x-ray • Criteria for cardiomegaly on CXR.	LGIS/PPT			✓	**A3**	

53				NEURORADIOLOGY	• Pericardial Effusion signs on chest x ray and how to differentiate between cardiac enlargement vs effusion. • How to Differentiate between pulmonary vascular congestion, interstitial pulmonary edema and alveolar edema on chest x-ray • Pulmonary Arterial Hypertension on CXR • Cardiac valvular diseases—Basic manifestations on chest x-ray • T VSD/ASD on chest x ray • Normal anatomic structures of the head and neck and Brain on CT scan. • Normal age-related changes in the brain imaging • Strengths, weaknesses and limitations of CT vs. MRI in evaluation of patient's with central neurologic symptoms and diseases • Indications for contrast enhanced MRI and CT • Imaging signs of increased intracranial pressure • How To Discriminate between a subdural and epidural hematoma at CT • Imaging signs of a subarachnoid hemorrhage on CT				✓	**A3**	See assessment section

Sr #	Days	Teacher	Specialty	Topic	Specific Learning Objectives (SLO)	MOT/MIT	Level of Cognition			Affective	MOA
							C1	C2	C3		
54	FRIDAY	DR SHUMAILA MUMTAZ	RHEUMATOLOGY	OA / RA/ SEPTIC ARTHRITIS/ GOUT	At the end of one hour lecture, students will be able to: a) Explain etiopathogenesis β)Describe clinical features and Diagnostic criteria c) Name Investigations to confirm disease d) Outline management plan including new modalities of treatment	LGIS/PPT			✓	**A3**	See assessment section
55	SATURDAY	DR SHUMAILA MUMTAZ	RHEUMATOLOGY	SERONEGATIVE SPONDYLOARTHROPATHY (Ankylosing Spondylitis, Psoriatic Arthritis, Enteric Arthritis)	At the end of one hour lecture, students will be able to: a) Explain pathophysiology of disease b) Describe clinical features and Diagnostic criteria c) describe diagnostic Investigations d) Outline management plan including new modalities of treatment and complications	LGIS/PPT			✓	**A3**	See assessment section
Sr #	**Days**	**Teacher**	**Specialty**	**Topic**	**Specific Learning Objectives (SLO)**	**MOT/MIT**	**Level of Cognition**			**Affective**	**MOA**
							C1	**C2**	**C3**		
12thWEEK											
56	MONDAY	DR SHUMAILA MUMTAZ	RHEUMATOLOGY	VASCULITIS/AUTOIMMUNE CTDs (SLE, Sjogren Syndrome, Scleroderma, Polymyositis, Dermatomyositis)	At the end of one hour lecture, students will be able to: a) Explain pathophysiology of disease b) Describe clinical features and Diagnostic criteria c) Name Investigations to confirm disease d) Outline Principles of management including new modalities of treatment	LGIS/PPT			✓	**A3**	See assessment section
57	TUESDAY	DR SHUMAILA MUMTAZ	RHEUMATOLOGY	BONE DISORDERS (Osteoporosis , Rickets Osteomalacia)	At the end of one hour lecture, students will be able to: a) Define individual diseases and clinical features b) Explain Etiopathogenesis c) Describe risk factors & Screening protocols d) Outline Principles of management including new modalities of treatment	LGIS/PPT			✓	**A3**	See assessment section

	WEDNESDAY	CPC									
58	THURSDAY	DR SHAWANA SHARIF (HOD)	DERMATOLOGY	FUNGAL SKIN INFECTIONS/ SCABIES/ ACNE	At the end of one hour lecture, students will be able to describe a) Sites, clinical features, classification and management of cutaneous fungal infections b) Mode of spread, clinical features, diagnosis and management of scabies c) Etiopathogenesis, clinical features and management of Acne	LGIS/PPT Case Vignette			✓	**A3**	See assessment section
59	FRIDAY	DR SHAWANA SHARIF (HOD)	DERMATOLOGY	ECZEMAS/ PSORIASIS	At the end of one hour lecture, students will be able to explain: a) Pathogenesis and risk factors and morphological types of psoriasis b) Sites, Clinical features and treatment options of Psoriasis c) Clinical features, classification, clinical morphology and management of Eczemas	LGIS/PPT Case Vignette			✓	**A3**	See assessment section
60	SATURDAY	DR SHAWANA SHARIF (HOD)	DERMATOLOGY	URTICARIA/ BULLOUS DISORDERS	At the end of one hour lecture, students will be able to explain: a) Classification, clinical features and management of urticaria b) Clinical features and classification of bullous disorders	LGIS/PPT Case Vignette		✓		**A3**	See assessment section

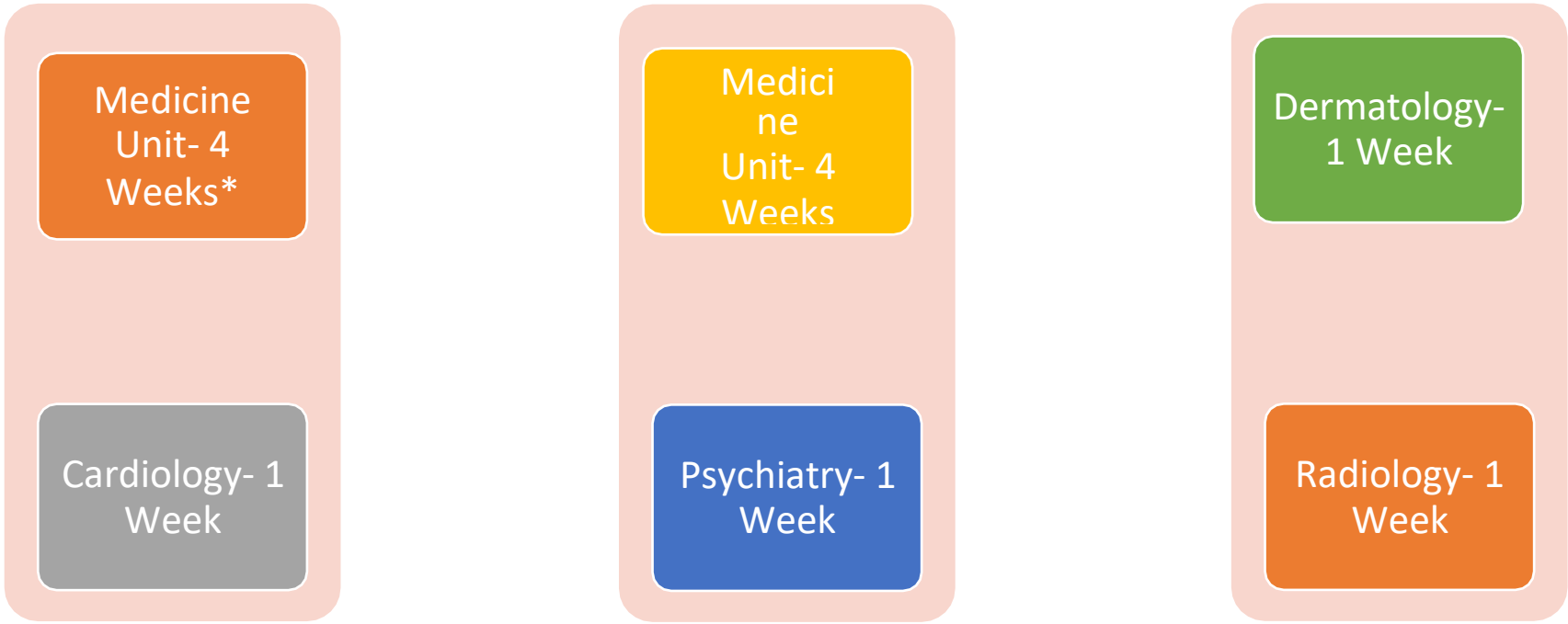
Section-II

Clinical Rotation

Ward rotation outline, timings, briefs of various approaches to clinical problems, details of various clinical problem approaches along with Learning Objectives, Mode of Teaching, and Level of Cognition

Ward Clinical Rotation

(Outline- week wise)



* Nephrology, Infectious Diseases, Gastroenterology &Hematology, Critical Care sub-rotations included

Month 1; First Medical Unit

Approach to various clinical issues

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	Approach to acute Dyspnea and Cough (Bronchial asthma, Pulmonary edema, Pulmonary embolism, Pneumothorax	Approach to Chronic Dyspnea (COPD)	Approach to Chronic Dyspnea (Idiopathic Interstitial Pneumonias)	Approach to Chronic Dyspnea (Sarcoidosis, Occupational Lung Disease)	Approach to patient managed in Medical Emergency	Approach to Pneumonia patient
2	Approach to Patient with Tuberculosis	Approach to a patient with Upper Gastrointestinal Bleed	Approach to a patient with Lower Gastrointestinal Bleed	Approach to a patient with Dyspepsia / Dysphagia	Approach to patient managed in Medical Emergency	Approach to a patient with Acute Diarrhea
3	Approach to a patient with Chronic Diarrhea	Approach to a patient with Acute Liver Disease	Approach to a patient with Chronic Liver Disease	Approach to patient with Acute Renal Failure	Approach to patient with Chronic Renal Failure	Approach to patient with Glomerulonephritis
4	Approach to patient with Renal involvement due to Systemic Diseases	Approach to patient with Acid Base and Electrolyte Disorders	General approach to patient with poisoning, and Approach to patient with Wheat pill, Phosphine poisoning	Approach to patient with Snake bite and corrosive Intake	Repetition/Reinforcement	Ward Test

Month 2; Second Medical Unit

Approach to various clinical issues

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	Approach to patient with Diabetes Mellitus	Approach to Patient with Diabetic complications	Approach to Patient with Thyroid and Adrenal Disorders	Approach to Patient with Stroke	Approach to Comatose patient	Approach to patient with Epilepsy
2	Approach to Patient with CNS infections	Approach to a patient with Neuropathy	Approach to a patient with Paraparesis	Approach to a patient with Arthritis	Approach to a patient with Connective Tissue Disorders	Approach to a patient with Anemia
3	Approach to a patient with Hepatosplenomegaly	Approach to a patient with Lymphadenopathy	Approach to a patient with Bleeding & Thrombotic Disorders	Approach to patient with FUO	Approach to patient with Dengue & Malaria	Approach to patient with COVID-19 and Enteric Fever
4	Approach to patient with HIV infection/AIDS	Approach to patient with Sepsis & MOD	Approach to patient with Respiratory Failure	Approach to patient with Shock	Repetition/ Reinforcement t	Ward Test

Month 3; Specialties- Cardiology, Dermatology, Psychiatry, Radiology

Approach to various clinical issues

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	Approach to patient with Ischemic Heart Disease	Approach to Patient with heart failure	Approach to Patient with valvular heart disease, infective Endocarditis	Approach to Patient with Hypertension	Approach to patient with Dysrhythmias	Ward Test
2	Approach to a patient with infectious dermatological Lesions	Approach to patient with papulosquamous eruptions (Psoriasis, Eczema and Lichen Planus	Approach to patient with Drug rash and Bullous disorders	Approach to patient with Scabies, Pediculosis, and acne vulgaris	Approach to a patient with Leprosy and cutaneous Leshmaniasis	Ward Test
3	Approach to a patient with Bipolar Affective decoders	Approach to a patient with Schizophrenia	Approach to a patient with Depressive Illness	Approach to patient with Substance use Disorder	Approach to patient with Anxiety and OCD	Ward Test
4	Approach to normal & abnormal CXR	Approach to CT brain	Approach to CT Abdomen	Approach to CT Chest	Approach to Ultrasound	Ward Test

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
1st WEEK															
1	MONDAY	PULMONOLOGY	APPROACH TO ACUTE DYSPNEA AND COUGH (Bronchial asthma, Pulmonary edema, Pulmonary embolism, Pneumothorax)	Student will be able to: a) Recall Etiology b) Describe clinical features, c) Suggest differential diagnosis d) Review basic management points in patient with acute dyspnea	Student will be able to: a) Take history and perform Chest examination with focus on etiology b) Interpret CXR in asthma, pneumothorax and pulmonary embolism, ABGs concerning the focused disease. c) Use Peak Flow Meter d) Practice writing treatment prescription e) Observe/assist Needle Chest aspiration/Chest tube intubation	Student will be able to: a) Take Consent for History, Clinical Examination and Procedures b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
2	TUESDAY	PULMONOLOGY	APPROACH TO CHRONIC DYSPNEA AND COUGH (COPD)	Student will be able to: a) Recall Etiopathogenesis b) Describe clinical features c) classification of disease, c) Suggest differential diagnosis	Student will be able to: a) Take history and perform Chest examination with focus on etiology b) Interpret CXR in COPD, Peak Flow Meter, ABGs concerning the focused disease. d) Practice writing Treatment prescription e) Observe/assist Oxygen Therapy	Student will be able to: a) Take Consent for History, Clinical Examination and Procedures b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
3	WEDNESDAY	PULMONOLOGY	APPROACH TO CHRONIC DYSPNEA AND COUGH (diffuse Interstitial lung diseases)	Students will be able to: a) Recall Etiopathogenesis b) Describe clinical features c) Classify the disease, d) Suggest differential diagnosis and investigations e) Short and Long term treatment plan including complications	Students will be able to: a) Take history and perform Chest examination with focus on etiology b) Interpret of CXR in DIP, Spirometry, ABGs concerning the focused disease. c) practice Treatment prescription d) Observe/assist Oxygen Therapy and Bronchoscopy	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING/ SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
4	THURSDAY	PULMONOLOGY	APPROACH TO CHRONIC DYSPNEA AND COUGH (Sarcoidosis and Occupational Lung Disease)	Students will be able to recall a) Etiopathogenesis b) Describe clinical features c) Suggest differential diagnosis and investigations d) Short and Long term treatment plan including complications	Students will be able to: a) Take history and perform Chest examination with focus on etiology . b) Perform Interpretation of CXR in DIP, Spirometry, ABGs concerning the focused disease. c) practice Treatment prescription d) Observe/assist Oxygen Therapy and Bronchoscopy	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
5	FRIDAY	EMERGENCY MEDICINE	approach to a critical patient presenting in ER	Students will be able to: a) State Presenting complaints b) Classify Severity of Asthma c) Outline basic management of Acute Severe Asthma, Stroke, Poisoning	Students will be able to: a) Take quick history and perform relevant brief clinical examination under guidance of treating team. b) Perform Basic Interpretation of ECG, CXR, CT brain, ABGs c) Observe and assist Oxygen therapy, IV cannulation, NG, Foleys, airway insertion, ascitic/pleural paracentesis and CVP d) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
6	SATURDAY	PULMONOLOGY	APPROACH TO PATIENT WITH PNEUMONIA	Students will be able to: a) Recall Etiopathogenesis b) Discuss clinical feature, severity scores and classification c) Name the complications d) Outline Management plan	Students will be able to: a) Take history and perform chest examination keeping in mind the cause. b) Perform interpretation of CXR in pneumonias, CBC, ESR, CRP, ABGs interpretation c) Observe/assist oxygen Therapy, sputum /blood culture collection d) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
2nd WEEK															
7	MONDAY	PULMONOLOGY	APPROACH TO PATIENT WITH TUBERCULOSIS	Students will be able to: a) Discuss epidemiology and etiopathogenesis b) Describe clinical feature, classification &investigations c) Outline Management plan including side effects of ATT d) recall MDR & XDRTB d) Explain methods for control and Prevention	Students will be able to: a) Take history and perform chest and relevant clinical examination keeping in mind the cause. b) Perform interpretation of CXR in Pulmonary TB patients. C) Develop Treatment prescription d) Observe/assist sputum Collection, pleural tap/biopsy e) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
8	TUESDAY	GASTROENTEROLOGY & HEPATOLOGY	APPROACH TO PATIENT WITH UPPER GI BLEED	Students will be able to: a) know Etiology and clinical features of UGI bleed b) Suggest Differential diagnosis, investigations and severity assessment c) Construct Short- and long-term treatment plan according to etiology	Students will be able to: a) Take history and perform abdominal examination keeping in mind the cause. b) Perform interpretation of abdominal imaging (ultrasound ,plain x ray abdomen) c) practice writing emergency management plan d) Master NG tube Insertion & feeding techniques e) Observe Upper GI endoscopy f) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
9	WEDNESDAY	GASTROENTEROLOGY & HEPATOLOGY	APPROACH TO PATIENT WITH LOWER GI BLEEDING	Students will be able to: a) know Etiology and clinical features of Lower GI bleed b) Suggest Differential diagnosis, investigations and severity assessment c) Construct Short- and long-term treatment plan according to etiology	Students will be able to: a) Take history and perform abdominal & relevant clinical examination according to cause b) Perform interpretation of abdominal imaging (ultrasound, plain x ray abdomen) c) practice writing emergency management plan d) Observe Lower GI endoscopy e) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
10	THURSDAY	GASTROENTEROLOGY & HEPATOLOGY	APPROACH TO PATIENT WITH DYSPEPSIA / DYSPHAGIA	Students will be able to: a) know Etiology and clinical features of Dysphagia b) Suggest Differential diagnosis &investigations c) Construct Short- and long-term treatment plan according to etiology	Students will be able to: a) Take history and perform abdominal & relevant clinical examination according to cause . b) Perform interpretation of abdominal imaging (ultrasound, plain x ray abdomen) c) practice prescription writing H pylori eradication treatment d) Observe GI endoscopy e) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome. c) Break bad news according to SPIKE model			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
11	FRIDAY	EMERGENCY MEDICINE	APPROACH TO MANAGEMENT OF PATIENT IN MEDICAL EMERGENCY	Students will be able to: a) State Presenting complaints b) Explain risk factors and diagnostic criteria c) Describe Basic management of DKA, hypoglycemia, and renal failure	Students will be able to: a) Take quick history and perform relevant brief clinical examination under guidance of treating team. b) Perform Interpretation of ECG, CXR, ABGs c) Observe and assist Oxygen therapy, IV cannulation, NG, Foleys, airway insertion, ascitic/pleural paracentesis and CVP d) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
12	SATURDAY	GASTROENTEROLOGY & HEPATOLOGY	APPROACH TO PATIENT WITH ACUTE DIARRHEA	Students will be able to: a) know Etiology and clinical features of acute diarrhea b) Suggest Differential diagnosis, investigations and severity assessment c) Construct treatment plan according to etiology	Students will be able to: a) Take history and perform abdominal clinical examination according to etiology B) Interpretation of investigations (serum electrolytes) c) practice prescription writing d) Observe and assist IV hydration of a patient e) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
3rd WEEK															
13	MONDAY	GASTROENTEROLOGY & HEPATOLOGY	APPROACH TO PATIENT WITH CHRONIC DIARRHEA	Students will be able to: a) know Etiology and clinical features of chronic diarrhea b) Suggest Differential diagnosis, investigations and severity assessment c) Construct treatment plan according to etiology	Students will be able to: a) Take history and perform abdominal & relevant clinical examination according to cause . b) Perform interpretation of abdominal imaging (ultrasound, plain x ray abdomen) c) enlist D/D & practice prescription writing d) Observe upper GI endoscopy e) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
14	TUESDAY	GASTROENTEROLOGY & HEPATOLOGY	APPROACH TO PATIENT WITH ACUTE LIVER DISEASE	Students will be able to: a) know Etiology and clinical features of acute liver disease b) Suggest Differential diagnosis, investigations and severity assessment c) Construct treatment plan according to etiology	Students will be able to: a) Take history and perform abdominal & relevant clinical examination according to cause . b) Perform interpretation of investigations (LFTs, PT, INR, APTT) c) practice writing emergency management plan d) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
15	WEDNESDAY	GASTROENTEROLOGY & HEPATOLOGY	APPROACH TO PATIENT WITH CHRONIC LIVER DISEASE	Students will be able to: a) know Etiology and clinical features of CLD b) Suggest Differential diagnosis, investigations and severity assessment c) Construct treatment plan according to etiology d) Discuss complications. (Ascites, HRS, HPS, Hepatic Encephalopathy) e) overview of HCC	Students will be able to: a) Take history and perform abdominal & relevant clinical examination according to cause . b) Perform interpretation of investigations (LFTs, PT, INR, APTT, USG abdomen) c) practice Treatment prescription d) Observe / Assist Ascitic tap e) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING / SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
				Students will be able to:	Students will be able to:	Students will be able									

16	THURSDAY	NEPHROLOGY	APPROACH TO PATIENT WITH ACUTE RENAL DISEASE	a) know Etiology and clinical features of Acute Renal Failure b) Suggest Differential diagnosis, investigations and severity assessment c) Construct treatment plan according to etiology d) Discuss complications and indications of dialysis in ARF	a) Take history and perform abdominal & relevant clinical examination act to cause . b) Perform interpretation of investigations (RFTs, Urine RE,ABGs) c) practice prescription writing d) Observe / Assist Double lumen catheter &dialysis e) Assist HCW in management of patient	to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
17	FRIDAY	NEPHROLOGY	APPROACH TO PATIENT WITH CHRONIC RENAL DISEASE	Students will be able to: a) Recall Etiology and clinical features of CKD b) Suggest Differential diagnosis, investigations and severity assessment c) Construct treatment plan according to etiology d) Discuss Uremic complications and indications of dialysis in CRF	Students will be able to: a) Take history and perform relevant clinical examination b) Perform interpretation of investigations (RFTs, Urine RE) c) practice prescription writing d) Observe / Assist Double lumen catheter &dialysis e) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
18	SATURDAY	NEPHROLOGY	APPROACH TO PATIENT WITH GLOMERULOPATHY	Students will be able to: a) Recall Etiology and pathophysiology b) Suggest Differential diagnosis, investigations and severity assessment c) Construct treatment plan according to etiology d) Discuss complications of glomerulonephritis	Students will be able to: a) Take history and perform relevant clinical examination b) Perform interpretation of investigations (RFTs, Urine RE) c) practice prescription writing d) Observe Renal biopsy e) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
4th WEEK															
19	MONDAY	NEPHROLOGY	APPROACH TO PATIENT RENAL INVOLVEMENT IN SYSTEMIC DISEASES (Diabetes, Hypertension, CTD, and Vascultis etc),	Students will be able to: a) Recall Etiology and pathophysiology b) Suggest Differential diagnosis, investigations to confirm diagnosis c) Construct treatment plan according to etiology and discuss complications	Students will be able to: a) Take History and examination keeping in mind etiology clinical features and complications b) Interpretation of related basic and specific investigations c) practice prescription writing d) Assist HCW in management of patient with renal disease complicating systemic illness	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
20	TUESDAY	NEPHROLOGY	APPROACH TO PATIENT WITH ACID BASE AND EELCTROLYTES DISORDER (Metabolic/respiratory acidosis/alkalosis, Hypo/hyperkalemia, Hypo/hypercalcemia, hypo/hyper-natremia)	Students will be able to: a) Recall Etiology and pathophysiology b) discuss clinical features of each c) Construct treatment plan according to etiology and discuss complications	Students will be able to: a) History and examination keeping in mind etiology and complications b) Perform Interpretation of related basic and specific investigations including ABGs c) write management algorithms d) Observe and Learn how to draw ABGS sample e) Assisting HCW in management of patient with Fluid electrolyte and acid base imbalance	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
21	WEDNESDAY	POISONING	GENERAL APPROACH TO POISONED PATIENT, WHEAT PILL POISONING, ORGANOPHOSPHATE POISONING	Students will be able to: a) Recall Pathophysiology, Clinical features & investigations b) Explain general and specific (antidotes) treatment of each poisoning, c) Indications for ICU Shifting in poisoned patient	Students will be able to: a) Take history and perform clinical examination keeping in mind the cause. b) Perform Interpretation of Investigations c) write emergency management plan d) Observing/Assisting/per forming NG Tube, IV access, ETT/Laryngeal airway placement/maintenance/care, Foleys catheter etc) e) Observe/Assist HCW in poisoning patient management	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
22	THURSDAY	POISONING	SNAKE BITE / CORROSIVE INTAKE	Students will be able to: a) Discuss Various types of snake bite and envemonization risk b) Explain clinical features, complications and treatment plan for snake bite patient c) Review Various types of corrosives, clinical features, diagnostic investigations, complications and treatment plan	Students will be able to: a) Take history and perform clinical examination keeping in mind the cause. b) Perform Interpretation of investigations (Bed side clotting test, PT, INR, DIC profile) c) Develop Treatment prescription d) Observing/Assisting/per forming Foleys catheter e) Observe/ Assist HCW in poisoning patient management	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
23	FRIDAY	Revision	Revision	Revision	Revision	Revision									See assessment section
24	SATURDAY	**WARD TEST**													
5th WEEK															
25	MONDAY	ENDOCRINOLOGY	APPROACH TO PATIENT WITH DIABETES MELLITUS	Students will be able to: a) Recall epidemiology, pathophysiology of disease b) Discuss clinical features , types of DM and Investigations to confirm diagnosis c) Describe management plan, including life style modifications and medications	Students will be able to: a) Take history and perform relevant clinical examination B) Perform Interpretation of investigations c) practice Treatment prescription d) Observe and perform Glucose monitoring of patients and insulin injection techniques e) Assist HCW in patient management	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING / SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
26	TUESDAY	ENDOCRINOLOGY	APPROACH TO PATIENT WITH DIABETES MELLITUS-COMPLICATIONS	Students will be able to: a) Recall epidemiology, pathophysiology of disease and its complications b) Discuss clinical features , & Investigations to confirm these complications c) Describe management plan, including life style modifications and medications, impact of complications on functional status of patient	Students will be able to: a) Take history and perform clinical examination keeping in mind the complications of disease B) Perform Interpretation of investigations (Serum ketones, urine ACR, RFTs, ABGs) c) practice writing prescription d) Observe and perform Glucose monitoring of patients and Observe fundoscopy e) Assist HCW in patient management	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING / SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
27	WEDNESDAY	ENDOCRINOLOGY	APPROACH TO PATIENT WITH THYROID AND ADRENAL DISORDERS	Students will be able to: a) Recall epidemiology, pathophysiology of disease b) Discuss clinical features & Investigations to confirm these diseases c) Describe management plan including complications, impact of disease on functional status of patient d) Explain Pregnancy and Surgical related issues in Thyroid and adrenal disorders	Students will be able to: a) Take history and perform clinical examination keeping in mind the nature of disease B) Perform Interpretation of investigations (Serum TSH, Serum cortisol, Dexamethasone suppression test) c) practice prescription writing d) Assist HCW in patient management	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING / SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
28	THURSDAY	NEUROLOGY	APPROACH TO PATIENT WITH STROKE	Students will be able to: a) Recall pathophysiology of disease b) Discuss clinical features & Investigations to confirm the diseases c) Describe management plan including complications, impact of disease on functional status of patient and preventive measures	Students will be able to: a) Take history and perform CNS examination keeping in mind the nature of disease B) Perform Interpretation of investigations (CT brain plain) c) practice prescription writing d) Assist HCW in patient management	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
29	FRIDAY	NEUROLOGY	APPROACH TO COMATOSED PATIENT	Students will be able to: a) Recall causes of Delirium/ Coma b) Review differential diagnosis of coma c) Explain grades of coma and GCS d) Suggest basic management points	Students will be able to: a) Take history and perform examination regarding comatose patient b) Perform Interpretation of investigations (CSF RE, CT brain) c) practice prescription writing d) Observe and perform Lumbar puncture under direct supervision e) Assist HCW in management of stroke patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
30	SATURDAY	NEUROLOGY	APPROACH TO PATIENT WITH EPILEPSY	Students will be able to: a) Recall defining criteria types and various clinical presentations b) Suggest investigations and differential diagnosis of Epilepsy c) Discuss treatment (immediate, long term), complications, and obstetric related issues	Students will be able to: a) Take history and perform CNS examination b) Perform Interpretation of related investigations like CT brain c) practice prescription writing d) Observe EEG e) Assist HCW in management of Epilepsy patients	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

6th WEEK

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
31	MONDAY	NEUROLOGY	APPROACH TO PATIENT WITH CNS INFECTIONS (Viral, Pyogenic and Tuberculosis meningitis, Encephalitis, Cerebral Malaria)	Students will be able to: a) Recall etiology & pathophysiology of disease b) Discuss clinical features & Investigations to confirm the diseases c) Describe management plan including complications, impact of disease on functional status of patient	Students will be able to: a) Take history and perform examination regarding comatose patient b) Perform Interpretation of investigations (CSF RE, CT brain) c) practice writing management plan d) Observe Lumbar puncture e) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
32	TUESDAY	NEUROLOGY	APPROACH TO PATIENT WITH NEUROPATHY (GBS, Diabetes, Vitamin Deficiency)	Students will be able to: a) Recall etiology & pathophysiology of disease b) Discuss clinical features & Investigations to confirm the diseases c) Describe management plan including complications, impact of disease on functional status of patient	Students will be able to: a) Take history and perform examination regarding comatose patient b) Perform Interpretation of investigations c) practice prescription writing d) Observe Lumbar puncture observe NCS/EMG e) Assist HCW in management of patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
33	WEDNESDAY	NEUROLOGY	APPROACH TO PATIENT WITHPARAPARESIS (Multiple sclerosis, compressive causes)	Students will be able to: a) Recall etiology & pathophysiology of disease b) Discuss clinical features & Investigations to confirm the diseases c) Describe management plan including complications, impact of disease on functional status of patient	Students will be able to: a) Take history and perform examination regarding comatose patient b) Perform Interpretation of investigations c) practice prescription writing d) Observe and perform Lumbar puncture under direct supervision, observe fundoscopy	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

					e) Assist HCW in management of patient											

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
34	THURSDAY	RHEUMATOLOGY	APPROACH TO PATIENT WITH ARTHRITIS (RA, OA, Septic Arthritis, Spondyloarthropies, and Gout)	Students will be able to: a) Recall etiology & pathophysiology of disease b) Discuss clinical features & Investigations to confirm the diseases c) Describe management plan including complications, impact of disease on functional status of patient	Students will be able to: a) Take history and perform Rheumatologic examination b) Perform Interpretation of related investigations c) practice prescription writing d) Observe and perform Joint aspiration and Intraarticular injection e) Assist HCW in management of arthritis patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING / SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
35	FRIDAY	RHEUMATOLOGY	APPROACH TO PATIENT WITH CONNECTIVE TISSUE DISORDER (SLE, Poly/Dermatomyositis, Systemic Sclerosis, Vasculitis)	Students will be able to: a) Recall etiology & pathophysiology of disease b) Discuss clinical features & Investigations to confirm the diseases c) Describe management plan including complications, impact of disease on functional status of patient	Students will be able to: a) Take history and perform Rheumatological examination keeping in mind the nature of disease b) Perform Interpretation of related investigations c) practice prescription writing d) Observe and perform Joint aspiration and Intrarticular injection e) Assist HCW in management of arthritis patient	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING / SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
36	SATURDAY	HEMATOLOGY	APPROACH TO PATIENT WITH ANEMIA	Students will be able to: a) Recall etiology & pathophysiology of disease b) Discuss Classification based on morphology and etiology c) Explain clinical features & Investigations to confirm the diseases d) Describe management plan including complications, impact of disease on functional status of patient	Students will be able to: a) Take History and examination keeping in mind etiology and complications of various anemia types b) Perform Interpretation of related basic and specific investigations c) practice prescription writing d) Observe and perform injection administration, blood sample collection e) Observe Bone marrow biopsy f) Assist HCW in management of patient with anemia	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
7th WEEK															
37	MONDAY	HEMATOLOGY	APPROACH TO PATIENT WITH HEPATOSPLEENOMEGALY	Students will be able to: a) Recall etiology & pathophysiology of this condition b) Explain clinical features & Investigations to confirm the diseases c) Describe management plan including complications, impact of disease on functional status of patient	Students will be able to: a) Take History and do examination keeping in mind etiology and complications of Hepatomegaly and splenomegaly b) Perform Interpretation of related basic and specific investigations c) practice writing prescription d) Observe and perform injection administration, blood sample collection e) Observe Bone marrow biopsy f) Assist HCW in management of patient with anemia	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
38	TUESDAY	HEMATOLOGY	APPROACH TO PATIENT WITH LYMPHADENOPATHY (Lymphoma, Leukemia)	Students will be able to: a) Recall etiology & pathophysiology of this condition b) Explain clinical features & Investigations to confirm the diseases c) Describe management plan including complications, impact of disease on functional status of patient	Students will be able to: a) Take History and perform examination keeping in mind etiology and complications of this condition b) Perform Interpretation of related basic and specific investigations c) enlist differential diagnosis d) Observe FNA/ LN biopsy . e) Assist HCW in management of patient with anemia	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
39	WEDNESDAY	HEMATOLOGY	APPROACH TO PATIENT WITH BLEEDING AND THROMBOTIC DISORDER (ITP, DIC, Hemophilia, Hypercoagulable states, DVT)	Students will be able to: a) Recall etiology & pathophysiology of hematological disorders b) Explain clinical features & Investigations to confirm the diseases c) Describe management plan including complications and long term prognosis of various associated diseases	Students will be able to: a) Take History and perform examination keeping in mind etiology and complications of this condition b) Perform Interpretation of related basic and specific investigations c) outline treatment strategy d) Observe / Assist blood products transfusion . e) Assist HCW in management of patient with anemia	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
40	THURSDAY	INFECTIOUS DISEASES	APPROACH TO PATIENT WITH FUO	Students will be able to: a) Recall etiology & classification of FUO b) Explain clinical features & Investigations to confirm the diseases c) Describe management plan including complications	Students will be able to: a) Take History and examination keeping in mind etiology clinical features and complications based on etiology b) Perform Interpretation of related basic and specific investigations c) practice Treatment prescription d) Observe and draw blood cultures, and sputum samples e) Perform Urine sample collection for culture sensitivity f) Assist HCW in management of patient with FUO	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
41	FRIDAY	INFECTIOUS DISEASES	APPROACH TO PATIENT WITH DENGUE AND MALARIA	Students will be able to: a) Recall etiology & pathophysiology of both diseases b) Explain clinical features & Investigations to confirm the diseases c) Classify dengue in to DF, DHF and DSS d) Describe management plan including complications	Students will be able to: a) Take History and perform examination keeping in mind etiology and complications of these conditions b) Perform Interpretation of related basic and specific investigations c) Develop Treatment prescription d) Observe / Assist blood products transfusion and perform fluid quota calculation . e) Assist HCW in management of patient of Dengue with focus on filling fluid quota monitoring sheet	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
42	SATURDAY	INFECTIOUS DISEASES	APPROACH TO PATIENT WITH COVID-19 AND ENTERIC FEVER	Students will be able to: a) Recall etiology & pathophysiology of both diseases b) Explain clinical features & Investigations to confirm the diseases c) Classify COVID-19 on basis of severity d) Describe management plan including complications and preventive measures	Students will be able to: a) Take History and perform examination keeping in mind etiology and complications of these conditions b) Perform Interpretation of related basic and specific investigations (blood C/s, Urine C/S, CXR,HRCT) c) Develop Treatment prescription d) Observe and practice doffing and donning e) Assist HCW in management of patient with Enteric Fever	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
8th WEEK															
43	MONDAY	INFECTIOUS DISEASES	APPROACH TO PATIENT WITH AIDS/HIV	Students will be able to: a) Recall etiology & pathophysiology of both diseases b) Explain clinical features & Investigations to confirm the diseases c) Describe management plan including complications and preventive measures	Students will be able to: a) Take History and perform examination keeping in mind etiology and complications of HIV b) Perform Interpretation of related basic and specific investigations c) Develop Treatment prescription d) Observe & performing Infection Control Practices	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
44	TUESDAY	CRITICAL CARE MEDICINE	APPROACH TO PATIENT WITH SEPSIS / MOD	Students will be able to: a) Recall etiology & pathophysiology of disease b) Explain clinical features & Investigations to confirm the disease c) Describe management plan including complications and outcomes	Students will be able to: a) Take History and perform examination keeping in mind etiology and complications of disease b) Perform Interpretation of related basic and specific investigations c) Develop Treatment prescription d) Observe & performing Infection Control Practices in ICU settings e) Observing and Perform ICU procedures like arterial tap for ABGs, CVP, and ETT etc.	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
45	WEDNESDAY	CRITICAL CARE MEDICINE	APPROACH TO PATIENT WITH RESPIRATORY FAILURE	Students will be able to: a) Recall definition etiology & pathophysiology of disease b) Explain types, clinical features & Investigations to confirm respiratory failure c) Describe management plan including complications and outcomes	Students will be able to: a) Take History and perform examination keeping in mind etiology and complications of disease b) Perform Interpretation of related basic and specific investigations c) Develop Treatment prescription d) Observe & performing Infection Control Practices in ICU settings e) Observing and Perform ICU procedures like arterial tap for ABGs, CVP, and ETT etc.	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
46	THURSDAY	CRITICAL CARE MEDICINE	APPROACH TO PATIENT WITH SHOCK	Students will be able to: a) Recall definition etiology & pathophysiology of disease b) Explain types, clinical features &Investigations c) Describe management plan including complications and outcomes	Students will be able to: a) Take History and perform examination keeping in mind etiology and complications of disease b) Perform Interpretation of related basic and specific investigations c) Develop Treatment prescription d) Observe & performing Infection Control Practices in ICU settings e) Observing and Perform ICU procedures like arterial tap for ABGs, CVP, and ETT etc.	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
47	FRIDAY	REPETITION/REINFORCEMENT	Revision of Difficult Disease Approaches and Compensation for Missed Disease Approaches												
48	SATURDAY	**WARD TEST**													
9th WEEK															
49	MONDAY	CARDIOLOGY	APPROACH TO PATIENT WITH IHD (Angina, myocardial infarction-NSTEMI & STEMI)	Students will be able to: a) Recall etiology & pathophysiology of disease b) Explain types, clinical features &Investigations c) Describe management plan including complications and outcomes d) Review life style modifications and preventive measure and impact of disease on functional status of patient	Students will be able to: a) Take History and perform CVS examination keeping in mind clinical features and complications b) Perform Interpretation of related basic and specific investigations c) practice writing emergency management of ACS d) Perform interpretation of related ECG findings e) Observe and perform BLS	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
50	TUESDAY	CARDIOLOGY	APPROACH TO PATIENT WITH HEART FAILURE	Students will be able to: a) Recall etiology & pathophysiology of disease b) Explain types, clinical features &Investigations c) Describe management plan including new modalities of treatment d) Review life style modifications and preventive measure and impact of disease on functional status of patient	Students will be able to: a) Take History and perform CVS examination keeping in mind clinical features and complications b) Perform Interpretation of related basic and specific investigations c) practice writing management of acute LVF d) interpretation of related ECG findings, e) Observe Echocardiography	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
51	WEDNESDAY	CARDIOLOGY	APPROACH TO PATIENT WITH VALVULAR HEART DISEASES AND INFECTIVE ENDOCARDITIS	Students will be able to: a) Recall etiology & pathophysiology of disease b) Explain clinical features & Investigations c) Describe management plan including new modalities of treatment d) Review life style modifications and preventive measures	Students will be able to: a) Take History and perform CVS examination keeping in mind clinical features and complications b) Perform Interpretation of related basic and specific investigations c) Develop Treatment prescription d) Perform interpretation of related ECG findings, e) Observe Echocardiography	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

52	THURSDAY	CARDIOLOGY	APPROACH TO PATIENT WITH HYPERTENSION	Students will be able to: a) Recall etiology & pathophysiology of disease b) Explain clinical features, Grades & Investigations c) Describe management plan including new modalities of treatment d) Review life style modifications and preventive measures	Students will be able to: a) Take History and perform CVS examination keeping in mind clinical features and complications b) Perform Interpretation of related basic and specific investigations c) Develop Treatment prescription d) Perform interpretation of related ECG findings, Observe Echocardiography	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
53	FRIDAY	CARDIOLOGY	APPROACH TO PATIENT WITH DYSARRYHTMIAS (tachy and brady arrhythmias with focus on premature ventricular contractions, atrial fibrillation, heart block, ventricular fibrillation, use of antiarrythmic agents)	Students will be able to: a) Recall etiology & pathophysiology of disease b) Explain clinical features, Grades & Investigations c) Describe management plan including new modalities of treatment d) Review life style modifications and preventive measures	Students will be able to: a) Take History and perform CVS examination keeping in mind clinical features, types, and investigations b) Describe management plan according to presentation c) Recall classification and indications of antiarrhythmic medications	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
54	SATURDAY	Cardiology	**WARD TEST**												
10th WEEK															
55	MONDAY	DERMATOLOGY	Approach to a patient with infectious dermatological lesions (bacterial, viral, and fungal)	Students will be able to: Remembering, understanding, and analyzing; etiology, pathology, clinical features, diagnostic approach, treatment, complications, newer modalities, and prevention. .	Students will be able to: Taking history and performing clinical examination required to identify lesions (learn to classify into primary and secondary skin lesions) Observe and learn use of Woods Lamp Observe and learn to collect skin scraping and use of magnifying glass Treatment prescription	Students will be able to: Challenges faced in this patient's management • Consent for History, Clinical Examination and Procedures • Counseling and educating patient about disease, its diagnosis, treatment and outcome. Showing empathy and respect keeping in mind			✓		✓		✓	AMBULATORY TEACHING / SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
56	TUESDAY	DERMATOLOGY	Approach to a patient with papulosquamous eruptions (Psoriasis, eczema and lichen planus)	Students will be able to: Remembering, understanding, and analyzing; etiology, pathology, clinical features, diagnostic approach, treatment, complications, and newer modalities.	Students will be able to: Taking history and performing clinical examination required to identify lesions Observe the procedure of skin biopsy Treatment prescription	Students will be able to: Challenges faced in this patient's management • Consent for History, Clinical Examination and Procedures • Counseling and educating patient about disease, its diagnosis, treatment and outcome. Showing empathy and			✓		✓		✓	AMBULATORY TEACHING / SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / Lab Work	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
57	WEDNESDAY	DERMATOLOGY	Approach to patient with Drug rash and Bullous disorders	Students will be able to: Remembering, understanding, and analyzing; etiology, pathology, clinical features, diagnostic approach, treatment, complications, and newer modalities.	Students will be able to: a) Take history and perform clinical examination required to identify lesions b) Observe how to collect skin scraping and use of magnifying glass, Observe Skin Biopsy c) Develop Treatment prescription	Students will be able to: Challenges faced in this patient's management • Consent for History, Clinical Examination and Procedures • Counseling and educating patient about disease, its diagnosis, treatment and outcome. Showing empathy and respect keeping in mind			✓		✓		✓	AMBULATORY TEACHING/ SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
58	THURSDAY	DERMATOLOGY	Approach to patient with Scabies, Pediculosis, and acne vulgaris	Students will be able to: Remembering, understanding, and analyzing; etiology, pathology, clinical features, diagnostic approach, treatment, complications, and newer modalities.	Students will be able to: Taking history and performing clinical examination required to identify lesions Prescription writing	Students will be able to: Challenges faced in this patient's management • Consent for History, Clinical Examination and Procedures • Counseling and educating patient about disease, its diagnosis, treatment and outcome. Showing empathy and			✓		✓		✓	AMBULATORY TEACHING/ SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
59	FRIDAY	DERMATOLOGY	Approach to patient with Leprosy and cutaneous Leishmaniasis (neglected tropical diseases)	Students will be able to: Remembering, understanding, and analyzing; etiology, pathology, clinical features, diagnostic approach, treatment, complications, and newer modalities.	Students will be able to: Taking history and performing clinical examination required to identify lesions To learn the procedure of skin smear Treatment prescription	Students will be able to: Challenges faced in this patient's management • Consent for History, Clinical Examination and Procedures • Counseling and educating patient about disease, its			✓		✓		✓	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
60	SATURDAY	DERMATOLOGY	**WARD TEST**												

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
11th WEEK															
61	MONDAY	PSYCHIATRY	HOW TO APPROACH A PSYCHIATRIC PATIENT / HOW TO MANAGE STRESS WHILE DEALING WITH PSYCHIATRIC PATIENT	Students will be able to: a) Summarize characteristics symptoms & signs in accordance with ICD-11 diagnostic criteria b) Discuss etiology in terms of bio-psycho-social behavior c) Know differential diagnosis of common psychiatric disorders d) Outline management plan for the patient					✓					AMBULATORY TEACHING/ SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	See assessment section
62	TUESDAY	PSYCHIATRY	APPROACH TO PATIENT WITH DEPRESSIVE ILLNESS	Students will be able to: a) Recall etiology & pathophysiology of disease b) Explain clinical features, Grades & Investigations c) Describe management plan including new modalities of treatment	Students will be able to: a) Obtain an appropriate history & perform mental state examination tailored to the nature and problem of the patient b) Assess the risk to self through suicide, deliberate self-harm or self-neglect. c) Perform relevant physical examination d) Provide psycho education to the patient and family e) Observe ECT	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING/ SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
63	WEDNESDAY	PSYCHIATRY	APPROACH TO PATIENT WITH BIPOLAR AFFECTIVE DISORDER	Students will be able to: a) Recall etiology & pathophysiology of disease b) Explain clinical features, Grades & Investigations c) Describe management plan including new modalities of treatment	Students will be able to: a) Taking Psychiatry related history b) Perform mental state examination c) Assess the risk to self through suicide, deliberate self-harm or self-neglect. d) Develop a comprehensive management plan e) Psychoeducate the patient and family regarding course and prognosis of Bipolar affective disorder	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING/ SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
64	THURSDAY	PSYCHIATRY	APPROACH TO PATIENT WITH SCHIZOPHRENIA/ SCHIZOAFFECTIVE	Students will be able to: a) Recall etiology & pathophysiology of disease b) Explain clinical features, Grades & Investigations c) Describe management plan including new modalities of treatment	Students will be able to: a) Obtain an appropriate history perform mental state examination tailored to the nature and problem of the patient b) Assess the risk to self through suicide, deliberate self-harm or self-neglect. & risk to others c) Perform relevant physical examination d) Observing EEG	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING/ SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
65	FRIDAY	PSYCHIATRY	APPROACH TO PATIENT WITH SUBSTANCE USE DISORDERS	Students will be able to: a) Recall etiology & pathophysiology of disease b) Explain clinical features, Grades & Investigations c) Describe management plan including new modalities of treatment	Students will be able to: a) Obtain an appropriate history & perform mental state examination tailored to the nature and problem of the patient b) Demonstrate motivational interview c) Perform relevant physical examination d) Psycho educate the patient and the career regarding the course and prognosis of the problem and ways to deal with them	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures . b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING/ SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
66	SATURDAY	PSYCHIATRY	**WARD TEST**												

Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
12th WEEK															
67	MONDAY	RADIOLOGY	APPROACH TO NORMAL AND ABNORMAL CHEST XRAY	Students will be able to: a) Review spectrum of pathologies on chest x-ray b) Review Manifestations of meningitis on plain and CECT brain c) Explain features of common pathologies on Chest x-ray, like pneumonia, TB, ILD, COPD, Pneumothorax	Students will be able to: a) Observe and master normal anatomy on chest x-ray, adequate and inadequate inspiratory films, AP , PA and lateral views b) Perform interpretation of common pathologies on chest x-ray	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING /SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
68	TUESDAY	RADIOLOGY	APPROACH TO CT BRAIN	Students will be able to: a) Recall different types of Stroke and their appearance on CT brain plain b) Review Manifestations of meningitis on plain and CECT brain	Students will be able to: a) Observe the normal anatomy of brain on CT b) Perform interpretations of ischemic insult are as on CT c) Observe different types of bleed on CT brain	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING /SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
69	WEDNESDAY	RADIOLOGY	APPROACH TO CT ABDOMEN	Students will be able to: a) Explain different CT protocols to detect various abdominal pathologies with particular emphasis on liver and pancreas b) Know normal bowel loop patterns and pattern in case of obstruction	Students will be able to: a) Observe the normal anatomy of abdomen on CT b) Perform interpretations of viscera, vessels, soft tissue and normal bowel pattern on CT	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING /SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section

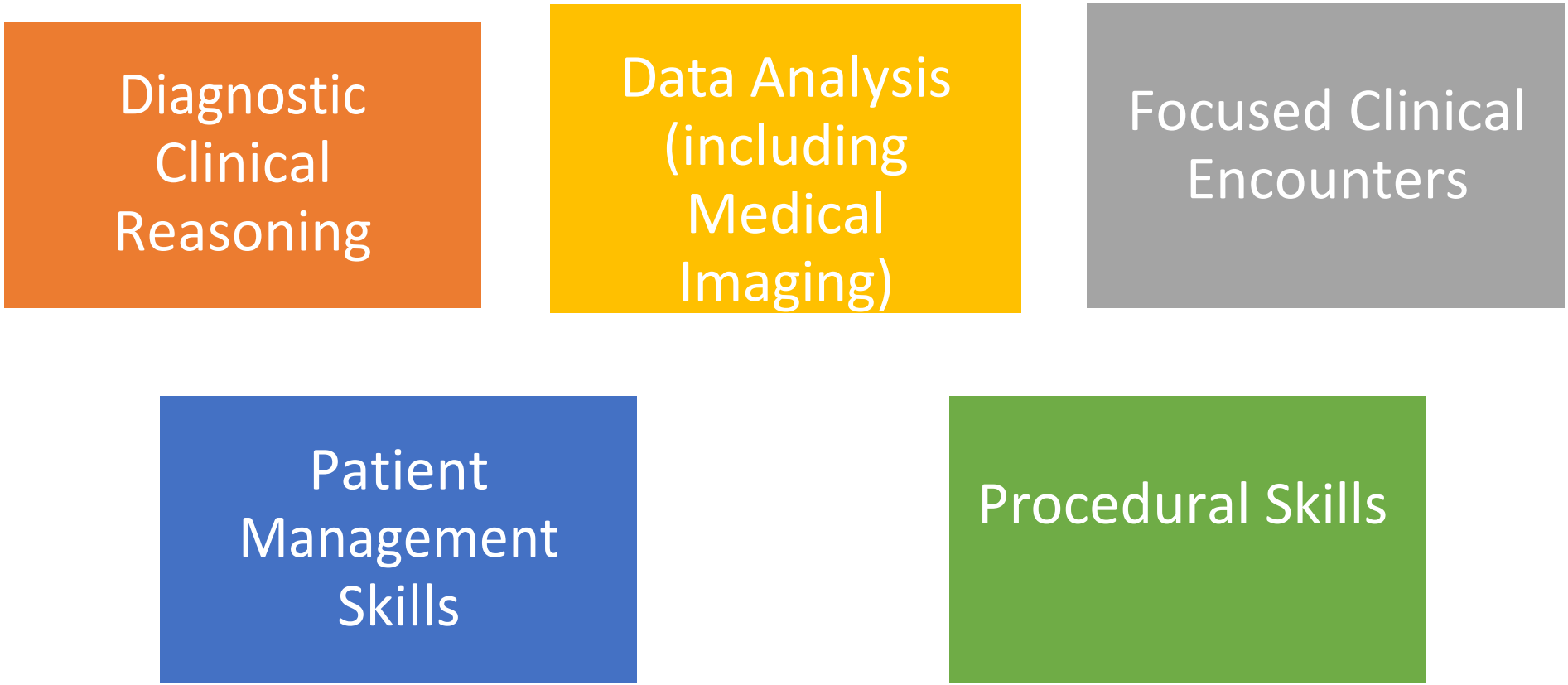
Sr #	Day	Specialty	Topic	SPECIFIC LEARNING OJECTIVES (SLO)			Cognition			Psychomotor		Attitude		MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
70	THURSDAY	RADIOLOGY	APPROACH TO CT CHEST	Students will be able to: a) Recall normal anatomy of chest b) Interpret basic chest pathologies on CT scan including Pneumothorax, TB, Pneumonia, Pulmonary edema	Students will be able to: a) Observe the normal anatomy of lungs, mediastinum and vessels on chest CT b) Practice and Perform interpretation of abnormal patterns of diseases on CT chest	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING /SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
71	FRIDAY	RADIOLOGY	APPROACH TO ULTRASOUND (abdomen/pelvis/chest), doppler studies, and Radionucleotide SCANS	Students will be able to: a) Recall normal anatomy of abdomen and pelvis on ultrasound b) Explain importance of doppler studies in evaluation of ischemia and thrombosis for early detection and prevention of chronic morbidity	Students will be able to: a) Observe the normal viscera on ultasound b) Observe the normal and abnormal color and power signal on color doppler c) Construct and interpret normal abdominopelvic scan report	Students will be able to: a) Take Consent for History, Clinical Examination and Procedures b) Counsel and educate patient about disease, its diagnosis, treatment and outcome.			✓		✓		✓	AMBULATORY TEACHING /SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	See assessment section
72	SATURDAY	RADIOLOGY	**WARD TEST**												

Section- III
Clerkship Description

Clerkship constituents and their details and case presentation guidelines

Clerkship Constituents

Clerkship activities include hands-on training based on actual interaction with patients covering five key areas:



Diagnostic Reasoning- Learning Objectives

Is a process by which clinicians collect, process, and interpret patient information to develop an action plan. This encompasses;

;

- Analyzing symptoms
- Detecting and interpreting clinical signs
- Suggesting differentials
- Planning relevant investigations
- Interpreting and analyzing data
- Creating case summaries
- Presenting findings

Focused Clinical Encounters- Learning Objectives

This entails interaction between student and patients to make plan about diagnosis and treatment. Following is included in this context;

- Approaching the patient in peculiar situations
- Taking a focused history
- Performing focused clinical examination
- Choosing appropriate diagnostic/ therapeutic options
- Recognizing and resuscitating acutely unwell patients

Data Analysis (Medical Imaging Inclusive) - Learning Objectives

Is meant to provide insight into clinical data and thus facilitate informed decision-making about the diagnosis and treatment of patients, prevention of diseases or others. This include following;

1. Interpreting and analyzing medical lab data
2. Identifying common lab errors
3. Recognizing normal and common abnormal ECG patterns (i.e. Ischemia, Acute MI, Axis deviation, Chamber enlargement, Heart blocks, APC, VPC, SVT, VT etc)
4. Recognizing normal and common abnormal patterns on various Medical Imaging modalities including X-rays, CT scans, MRIs, ultrasounds, Echocardiography, and Radioisotope scans
5. Knowing basics of EEG
6. Should acquire clinical acumen for ordering and basic interpreting results of common investigations like:
    a. CBC, urinalysis, culture and sensitivity, serum creatinine, blood urea, creatinine clearance, ultrasound etc.
    b. Echocardiography, Stress testing, Angiography, and the conclusions of ThalliumScan

c. Pulmonary function tests.

d. Arterial blood gas estimations

e. Thyroid function tests

f. Understand the conclusion of HRCT of the lungs.

7. Interpret and/or identify: common radiological findings of bone and joint diseases (Rheumatoid arthritis, Osteoarthritis, Vertebral collapse, and Caries spine, etc).

Patient Management Skills- Learning Outcomes

Following are need to be focused;

1. Explaining patho-physiological concepts
2. Analyzing symptoms
3. Recognizing clinical signs
4. Making diagnostic plans
5. Discussing lifestyle modifications
6. Comparing therapeutic options
7. Writing prescriptions
8. Recording medical notes
9. Seeking interdisciplinary consults
10. Counseling patients and their relatives on relevantissues

Procedural Skills- Learning Outcomes

Following need to be focused,

1. Explaining the need for a procedure
2. Explaining the details of a procedure to the patient or his/herattendant
3. Planning necessary pre-procedurework-up
4. Preparing the patient forprocedure
5. Assisting theprocedure
6. Performing the procedure independently
7. Managing the complications or post-procedure problems
8. Medical graduates should be able to perform and/or provide:
    - Basic Life-support.
    - Inject I/V, I/M, S/C, intradermal injections
    - Insert and maintain I/V lines.
    - Administer Blood transfusion (know the indications, contra- indications and complications of blood transfusions).
    - Treatment for acute pulmonary edema and anti-platelet therapy
    - Oxygen therapy: should know the indications, complications, different modes of Oxygen delivery
    - Peak expiratory flowmetry (PEFR).

- Nebulization
- Educate the patient regarding correct inhaler technique
- Should be able to take an Electrocardiogram: should be able differentiate normal electrocardiograms from common abnormalities of ischemia, left ventricular hypertrophy and arrhythmias (acute myocardial infarction/ischemia, complete heart block, atrial premature contractions, ventricular premature contractions, supraventricular tachycardia, ventricular tachycardia, left bundle branch block and hyperkalemia)
- Urinary catheterization and collect urine samples
- Large bowel enema.

9. **Procedures to be observed/assisted:** preferably on patients but videos can be an alternative (including the indications, contra indications, steps of the procedure and complications)
    - Passing the N/G Tube, and feeding, suction and stomach wash.
    - Preparing a patient for endoscopy, upper and lower GIT and to observe the procedures.
    - Placing airway and its maintenance.
    - Endotracheal tube placement
    - Endotracheal suction/maintenance of airway/nursing on side etc.
    - Preparing a patient for Bronchoscopy and to observe the procedure.
    - Should observe, learn and even may assist electroversion therapy, (AED) with indications, complications etc.
    - Aspiration of fluids (Pleural, Peritoneal, Pericardial and Knee)
    - Under water seal aspiration

- Lumbar puncture

- Fine needle aspiration
- Bone marrow aspiration/Trephine.
- Dialysis

9. Should know the indications, contra-indications, procedure and complications of
   - Holter monitoring
   - Nitrate Infusion
   - Thrombolysis
   - Digitalization

Case Presentation Guidelines

Presenting patients to seniors or peers

A student has to make the most of all learning opportunities. He/she should always take opportunities to present formally to seniors. The chance to talk through a history and examination, picking out important things, being asked to explain points, and then being challenged about future management of the patient is invaluable.

There are two types of case presentation. The **'teaching presentation'** is an all-inclusive presentation of the history, examination, and investigation findings, culminating with a well-constructed conclusion. Student will be expected to utilize this type of presentation during teaching sessions. One need to present a comprehensive, chronological case report, trying to demonstrate to the audience your diagnostic reasoning; this kind of presentation is also used at academic meetings such as hospital grand rounds and conferences.

The second type is the **'business presentation'**, utilized on busy ward rounds. The aim is to convey all the key points of the clerking in a few well-chosen sentences. If done well, the other members of the ward round are presented with a matter of fact, with which they should concur. This interaction is rapid and is learnt over many years on rounds. Students initially find it difficult to master, but improve with experience and knowledge. On business rounds students should listen to the way experienced doctors discuss cases. The good ones are

focused, succinct, and quickly include and exclude relevant diagnoses with sharp and incisive comments. Student should try to get involved by clerking patients and asking to present them in this style. Presenting like this forces student to prioritize information and sharpen diagnostic reasoning.

Both presenting styles share key principles:

- Always structure presentation in terms of history, examination, and investigations, and conclude by outlining the current management plan. Finish one before starting the next and introduce the next section as you begin. 'This 43-year-old female presented with history of …. On examination she has …. Blood tests revealed … and chest x-ray showed ….She has been managed with…'

- Try to pack information into each sentence: 'a 24-year-old shop keeper presenting generally unwell with a 2-day history of fever, dysuria, and now worsening flank pain'.

- Give people summaries of what is about to come next: 'examination was unremarkable, with a clear chest, normal heart sounds and soft non-tender abdomen'.

Example format for 'business' presentations;

- Demographics: Age, sex, ethnicity, occupation.
- Presenting complaint: Just a few words needed.
- Relevant background: Any important factors from elsewhere in the history that directly impact on the presentation.
- History of presenting complaint: a few sentences. Only mention relevant negatives.
- Past medical history: Only dwell on conditions likely to affect diagnosis or management.
- Drug history: Often no need to read them all out. Mention key ones relevant to the presentation, e.g. warfarin or NSAIDs in a patient presenting with hemorrhage.
- Family history: Only if relevant.
- Social history: Give a one-sentence description of where the patient lives and how independent they are. Mention briefly tobacco and alcohol use.
- Examination:Mentionhowtheylookgenerally,andanyspecificpositivefindings.Sumupallthenegativeswherepossible, e.g. 'little to find on examination except…'
- Impression: Always try to form an impression.

- Plan: Mention what has been done already, and what your senior needs to decide upon.

The key to these presentations is relevance, something which is difficult to judge even with experience. Furthermore, different seniors will have different preferences about how much information they wish to be told. Below is an example presentation of a very straightforward patient on a busy ward round. Making such a presentation is an excellent chance to be a part of clinical decision-making, though student may not have the chance to ask all the questions he would like to. Discussing the case thoroughly later on will mean that teaching value of this case will not be missed. Below is given presentation of a patient as reference example;

Mrs. ABC, 65-year-old, house old house wife was admitted last night with acute shortness of breath. She has been diagnosed to have hypertension and ischemic heart disease for 5 years. She complains of orthopnea and paroxysmal nocturnal dyspnea for last 10 days. She takes medication prescribed by Cardiologist irregularly. At admission she was distressed, tachypnic, and febrile (100F). Her pulse was 100/minute and blood pressure 150/100. Chest examination showed bilateral basal crackles and signs suggestive of consolidation in right axilla. Her ECG showed ST elevations in chest leads. Chest X-ray showed cardiomegaly. Her TLC and CRP were raised. Her cardiac troponins were not raised. My impression is that she is having pulmonary edema and pneumonia in back ground of Hypertension, and Ischemic Heart Disease. She has been treated with diuretics, antibiotics, oxygen, prophylactic heparin and ACE inhibitors. She is currently better. Her echocardiogram is planned after 2 days.

Section- IV
Family Medicine, Artificial Intelligence, Research, Biomedical Ethics

Family Medicine

Family Medicine pertains to treatment of patients of all ages, from birth to death, and internal medicine doctors treat adults, 18 years or older. A family physician has knowledge and skills to manage common outpatient and emergency problems at the level of primary and secondary care. He/she is able to provide health care in the context of the family and local community, and is able to integrate principles of family medicine in their day to day interaction with patients. On one hand medical wards/units rotation pertains to adult medicine while the subspecialties rotation pertains to patients of all ages. Similarly Pediatric rotation covers the younger age group. Medicine and Allied rotation/clerkship thus focuses family medicine components related to it.

Artificial Intelligence

Artificial intelligence (AI) is affecting various fields of medicine substantially and has the potential to improve many aspects of healthcare. However, AI has been creating much hype, too. AI is being used in Dermatology, and Radiology etc. Medical students will be provided overview of AI during clinical rotation and encouraged to work on the same with coordination of AI Department.

Research, Biomedical Ethics

Final year students will be encouraged and facilitated to follow RMU framework/guidelines/syllabus available separately keeping in mind Medicine & Allied rotation

Section- V
Assessment

Final Professional MBBS Examination

Rawalpindi Medical University Scheme

<table>
<tr><td colspan="4">Theory
28% of total marks
40% of Theory + Clinical & Practical</td><td colspan="3">Clinical & Practical
42% of total marks
Uniform, standardized
60 % of Theory + Clinical & Practical</td><td>Internal Assessment (30%)</td><td>Total</td></tr>
<tr><td colspan="4">140</td><td colspan="3">210</td><td rowspan="7">150</td><td rowspan="7">500</td></tr>
<tr><td colspan="2">Paper I</td><td colspan="2">Paper II</td><td colspan="3" rowspan="2">Observed Structured Clinical Evaluation</td></tr>
<tr><td colspan="2">70</td><td colspan="2">70</td></tr>
<tr><td>MCQs</td><td>SAQs</td><td>MCQs</td><td>SAQs</td><td>Long Case</td><td>Short Cases</td><td>Practical</td></tr>
<tr><td>45
(1 number each)</td><td>5
(5 number each</td><td>45
(1 number each)</td><td>5
(5 number each</td><td>3 stations
(24 numbers each)</td><td>4 stations
(22 numbers each)</td><td>5 stations
(10 numbers each)</td></tr>
<tr><td colspan="4">Numbers</td><td colspan="3">Number</td></tr>
<tr><td>45</td><td>25</td><td>45</td><td>25</td><td>60</td><td>80</td><td>70</td></tr>
</table>

- *Pass marks 50%. Theory and Clinical Components need to be passed separately. In Clinical Component obtaining 50% marks in Long and Short Case stations is mandatory to pass.*
- *The continuous internal assessment marks will be equally distributed to the Theory and Clinical Practical Examinations. Theory marks will thus be 140+75=215 (43%), and Clinical Practical marks will be 210+75=285 (57%),*

Final Professional MBBS Examination- RMU And UHS Comparison

<table>
<tr><th colspan="8">Rawalpindi Medical University (RMU)</th></tr>
<tr><td colspan="4">Theory
28% of total marks
40% of Theory + Clinical & Practical</td><td colspan="3">Clinical & Practical
42% of total marks
Uniform, standardized
60 % of Theory + Clinical & Practical</td><td>Internal Assessment (30%)</td><td>Total</td></tr>
<tr><td colspan="4">140</td><td colspan="3">210</td><td rowspan="5">150</td><td rowspan="5">500</td></tr>
<tr><td colspan="2">Paper I</td><td colspan="2">Paper II</td><td colspan="3" rowspan="2">Structured Clinical Evaluation</td></tr>
<tr><td colspan="2">70</td><td colspan="2">70</td></tr>
<tr><td>MCQs</td><td>SAQs</td><td>MCQs</td><td>SAQs</td><td>Long Case</td><td>Short Cases</td><td>Practical</td></tr>
<tr><td>45
(1 number each)</td><td>5
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(1 number each)</td><td>5
(5 number each</td><td>3 stations
(24 numbers each)</td><td>4 stations
(22 numbers each)</td><td>5 stations
(10 numbers each)</td></tr>
<tr><td colspan="4">Numbers</td><td colspan="3">Number</td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td>45</td><td>25</td><td>45</td><td>25</td><td>72 (34.28%)</td><td>88 (41.9%)</td><td>50 (23.8%)</td></tr>
<tr><th colspan="8">University of Health Sciences (UHS)</th></tr>
<tr><td colspan="4">Theory
35% of total marks
38.8% of Theory + Clinical & Practical</td><td colspan="3">Clinical & Practical
55% of total marks
61.2% of Theory + Clinical & Practical</td><td>Internal Assessment (10%)</td><td>Total</td></tr>
<tr><td colspan="4">175</td><td colspan="3">275</td><td>50</td><td>500</td></tr>
<tr><td colspan="2">Paper I</td><td colspan="2">Paper II</td><td rowspan="2">Long Case</td><td rowspan="2">Short Case</td><td rowspan="2">OSCE</td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td colspan="2">90 marks</td><td colspan="2">85 marks</td></tr>
<tr><td>MCQs</td><td>SEQs</td><td>MCQs</td><td>SEQs</td><td>90</td><td>120</td><td>65</td><td></td><td></td></tr>
<tr><td>45 (1 number each)</td><td>9 (5 numbers each)</td><td>40 (1 number each)</td><td>9 (5 numbers each)</td><td>32.7%</td><td>43.6%</td><td>23.6%</td><td></td><td></td></tr>
</table>

- *Internal assessment marks are equally distributed to theory and Practical components.*
- *For UHS Theory marks are 174+25=200 (40%), and Clinical Practical marks will be 275+25=300 (60%)*
- *For RMU Theory marks are 140+75=215 (43%), and Clinical Practical marks will be 210+75=285 (57%)*

Final Professional MBBS Examination

Written Component- Table of Specification

Paper I

	Topic Distribution	MCQs- 45	SAQs- 5
1	Respiratory Medicine	7	1
2	Cardiovascular Diseases	7	1
3	Gastroenterology and Hepatobillary Diseases	7	1
4	Neurology	6	1
5	Rheumatology	6	1
6	Hematology	6	
7	Poisoning	6	

Paper II

	Topic Distribution	MCQs- 45	SAQs- 5
1	Infectious Diseases	7	1
2	Endocrinology including Diabetes Mellitus	7	1
3	Nephrology	7	1
4	Psychiatry and Behavioral Sciences	6	1
5	Acid Base, Water and Electrolytes Disorders	6	1
6	Dermatology	6	
7	Critical Care	6	

Both Papers

MCQS 90= 90 numbers	**SAQs 10= 50 numbers**	**140 numbers**

*Five percent (5%) questions may come from any topic

Clinical & Practical Component Breakup

1	Long Case History	24
2	Long Case Examination	24
3	Long Case Discussion/Management	24
4	Short Case Respiratory	22
5	Short Case CVS	22
6	Short Case CNS	22
7	Short Case GIT	22
8	Work Book, Log Book	10
9	ECG, Instrument, Medication	10
10	X-Ray and CT Scan	10
11	Counseling	10
12	BLS	10

- ***All candidates will take history, examine a clinical system or component, do counseling, perform BLS related activity, and get review of Work and Log Book etc with reference to uniform written command in specified time,***
- ***Information to Examiner/Key based assessment of each student will be done e.g., evaluation of clinical examination general demeanor, examination technique, examination findings, likely differential diagnosis based on the finding, probable causes and severity of the condition etc will be focused keeping in mind clinical scenario.***

Clinical and Practical Component Cycle

<table>
<tr><td>1
Long Case
History Taking</td><td>2
Long Case
Examination</td><td>3
Long Case
Discussion/Viva Voce</td></tr>
<tr><td>12
BLS related</td><td rowspan="3">OSCE
Final Year MBBS
5 minutes/station
60 minutes' minimum cycle, can be increased with Rest Stations
Total Marks 210
Station 1-7= 20 numbers each
Station 8-12= 14 numbers each</td><td>4
Short Case- Respiratory</td></tr>
<tr><td>11
Counseling</td><td>5
Short Case- CVS</td></tr>
<tr><td>10
X-Ray & CT scan Station</td><td>6
Short Case- CNS</td></tr>
<tr><td>9
ECG, Instrument/Medication</td><td>8
Log Book, Work Book</td><td>7
Short Case- GIT</td></tr>
</table>

Station Details- Clinical and Practical Component Cycle

Station 1	Long Case History	*Student will be asked to take history from a patient or surrogate pertaining to a clinical problem.*
Station 2	Long Case Examination	*Examiner will observe and mark according to key.* *Student will be asked to do relevant clinical examination keeping in mind the clinical scenario given in long case history station*
Station 3	Long Case Discussion	*Examiner will observe and mark according to key.* *Examiner will ask questions pertaining to history, examination findings, interpretation, and management etc according to key*
Station 4	Short Case- Respiratory System	*Student will be asked to perform focused clinical examination of chest pertaining to a clinical scenario.*
Station 5	Short Case- CVS	*Examiners will observe and ask brief questions pertaining to findings, interpretation, and management etc where relevant according to key* *Student will be asked to perform focused clinical examination of CVS keeping in mind given clinical scenario.*
Station 6	Short Case- CNS	*Examiners will observe and ask brief questions pertaining to findings, interpretation, and management etc where relevant according to key* *Student will be asked to perform focused clinical examination of CNS keeping in mind a*

		clinical scenario for assessment of knowledge, skill and attitude.
Station 7	Short Case- GIT	*Examiners will observe and ask brief questions pertaining to findings, interpretation, and management etc where relevant according to key Student will be asked to perform focused clinical examination of GIT keeping in mind a given clinical scenario for assessment of knowledge, skill and attitude.*
Station 8	Log Book, Work Book evaluation, CPC participation, and Research Evaluation (if relevant)	*Examiners will observe and ask brief questions pertaining to findings, interpretation, and management etc where relevant according to key* Students will be asked questions focusing patients documented and about the CPCs attended. If any research is done its pertinent components be discussed
Station 9	ECG, Instrument/Medication	*ECG, Instrument or medication will be shown to the student.*
Station 10	X Ray, CT Scan Station	*Questions focusing relevant findings, diagnosis, identification, utilization-indications, contraindications, complications, administration, and interactions will be asked according to key X-Rays or CT scan will be shown.*
Station 11	Counseling Station	*Questions will focus relevant findings, diagnosis, and etiology etc according to key. In a given scenario Focusing autonomy, confidentiality, beneficence, justice, no harm, empathy, breaking bad diseases, and safety net etc students ability to solve relevant issue will be evaluated.*
Station 12	BLS related Station	*Scenario focusing BLS component will be given.*

Student will be observed by Examiner for managing the issue. Relevant questions will be asked accrding to key including identification, usage of equipment (Defibrillator, Oxymetre etc) .

Internal Assessment- RMU

Details and marks distribution

Clerkship- Unit/Ward Wise Assessment *A- Work Place Based (WPBA)- 50%* *+* *B- Ward Test (WT)- 50%*	1st Medical Unit	2nd Medical Unit	Cardiology	Psychiatry	Dermatology	Radiology	60
	20	20	5	5	5	5	
EBE It will comprise clinical (40 marks-50% of total EBE marks) and MCQ/SAQ (40 marks- 50% of total EBE marks) similar to framework of Final Professional Examination in Medicine							80
CPC Attended≥75% 10marks Attended >75% Zero mark							10
Total							**150**
*Unit/Ward assessment will be rounded.							

- A student having publication (Medicine & Allied related) in non-predator Journal during Final Year MBBS period will get extra 7.5 marks. Addition of these numbers will not be over and above total 150 numbers. Credit of these marks cannot be taken in other subjects.
- There is no compensation for attendance for missed period(s) of clerkship. Remedial learning can only be used to make up for compensation of clerkship objectives not attendance.

Internal Assessment 150 Marks
% Wise Breakup

Component	**% of Internal Assessment**
EBE- 80/150	53.3%
Clerkship- Unit/Ward assessment- Work Place Based (WPBA) and Ward Test (WT) Assessment 60/150	40%
CPC 10/150	6.7%
**Publication- 7.5/150*	*5%*

- *Details have been provided in previous page*

Clinical Rotation/Clerkship- Unit/Ward; Work Based Assessment (WBA)

and Ward Test (WT)

Marking details- At One Medical Unit (20 marks)

WBA- 10 marks (50%)			**WT - 10 marks (50%)**
2 Case Presentation/morni ng report	Clinical Work Book assessment (5 Case Write Ups on Work Book)	6 Evening duties in in Ward/ER	
4	3 5 Complete Case Write ups Yes -3 No, <5- Zero	3 Attended all Yes - 3 No, <6 – Zero	10
20%	15%	15%	50%

Subspecialties will reduce components to 5 keeping in mind 1 week duration compared to 4 weeks of one Medical Unit

End Block Examination (EBE)

- End Block Examination (EBE) has been devised for assessment of three months Rotation/Clerkship. It has undergone a number of modifications over last few years. A lot of effort has been done to make it uniform and standardized keeping in mind attachment of Medical Students to more than one hospital and Ten Departments.
- It will be held at the end of each Block (after 12 weeks) on last working days.
- It will include theory (MCQs and SAQs- 40 numbers) and clinical (OSCE- 40 numbers).
- MCQ and SAQs component will be according to Final RMU Examination pattern.
- OSCE will be the same as RMU Final professional Examination Clinical and Practical Component as given in next component.

- Pass marks are 50%. Both theory and clinical components have to be passed separately. 50% marks are mandatory in Long and Short Case components to pass Clinical Component.

End Block Examination (EBE) - 80 numbers

Written Component- 40 Numbers

It will include 40 MCQS, each of 0.5 number

It will be held after CPC on Wednesday in last working week.

Table of Specification

	Topic Distribution	**MCQs-40 each of 0.5 numbers**	**SAQs-10 Each of 2 numbers**
1	Respiratory Medicine	4	1
2	Cardiovascular Diseases	4	1
3	Gastroenterology and Hepatobillary Diseases	4	1
4	Neurology	4	1
5	Psychiatry and Behavioral Sciences	3	1
6	Nephrology	2	1
7	Endocrinology including Diabetes Mellitus	3	1
8	Infectious Diseases	3	1
9	Dermatology	3	2
10	Critical Care	2	
11	Acid Base, Water and Electrolytes Disorders	2	
12	Poisoning	2	
13	Rheumatology	2	
14	Hematology	2	

MCQS 40= 20 numbers	**SAQs 10= 20 numbers**	**Total Theory= 40 numbers**

Clinical Component Stations

It will include 12 Stations. It will be of 40 marks

	COMPONENT	Numbers
1	Long Case History	4
2	Long Case Examination	4
3	Long Case Discussion/Management	4
4	Short Case Respiratory	3
5	Short Case CVS	3
6	Short Case CNS	3
7	Short Case GIT	3
8	Work Book, Log Book	3
9	ECG, Instrument, Medication etc	3
10	X-Ray and CT Scan	3
11	Counseling	3
12	BLS	4
	Total	**40**

- 50% marks are mandatory in Long and Short Case components to pass Clinical Component.

Clinical and Practical Component Cycle

<table>
<tr><td>1
Long Case
History Taking</td><td>2
Long Case
Examination</td><td>3
Long Case
Discussion/Viva Voce</td></tr>
<tr><td>12
BLS related</td><td rowspan="3">EBE
Final Year MBBS

5 minutes/station
60 minutes' minimum cycle, can be increased with Rest Stations
Total Marks = 40
Station1-3 & 12 = 4 marks each
Station 4- 11 =3 marks</td><td>4
Short Case- Respiratory</td></tr>
<tr><td>11
Counseling</td><td>5
Short Case- CVS</td></tr>
<tr><td>10
X-Ray & CT scan Station</td><td>6
Short Case- CNS</td></tr>
<tr><td>9
ECG, Instrument/Medication</td><td>8
Log Book, Work Book</td><td>7
Short Case- GIT</td></tr>
</table>

Final Year MBBS Clerkship- Unit/Ward Work Based Assessment (WBA)
10 Marks- (MU-II HFH Template)

Name		**Roll No**	
Batch		**Dates of Session**	

A- Clinical Work Book Assessment- 3 Marks

3 marks for 5 Complete Clinical Write ups according to Work Book components, Zero for any incomplete and<5

S No	Case Diagnosis	Assessed by	Assessment	Signature
1		Dr Nida Anjum	Complete Incomplete	
2		Dr. Raja Asif	Complete Incomplete	
3		Dr. Madeeha Nazar	Complete Incomplete	
4		Dr. Unaiza Sharif/Dr Noman	Complete Incomplete	

5		Dr Mudasar	Complete Incomplete	

B- 2 Case Presentations- 4 Marks

4 marks for 2 satisfactory Case Presentation/Morning Reports,

Zero for any unsatisfactory or <2 Case Presentations

S No	**Case Presentation/Morning Report**	**Assessed by (Consultant Name)**	**Assessment**	**Signature**
1			Satisfactory Unsatisfactory	
2			Satisfactory Unsatisfactory	

C- 6 Evening Duties in Ward/ER- 3 Marks

3 marks for all attended and documented,

Zero for <6 attended and documented

Date	Patient Documentation	Assessed by	Assessment	Signature

Composite Marks

Case Presentations	Work Book Assessment	6 Evening Duties	Total
-----/4	----/3	----/3	----/10
Consultant Incharge Final Year MU-II HFH Dir. Mudasar		**Signature, Date, Stamp**	

Ward Test- 10 Numbers

HFH MU-I or MU-II HFH

Station	Topic	Topic description	LOS	Marks %
1	Long case History taking	Respiratory system • COPD, Pneumonia, Tuberculosis, Asthma, Thromboembolic disease, Pleural disease, ILD &Sarcoidosis, Lung Cancer GIT • Gastro-esophageal reflux (GERD), Peptic ulcer disease (PUD), Acute and chronic diarrhea, Celiac disease, Inflammatory bowel disease, Irritable bowel syndrome, Colorectal carcinoma • Acute Hepatitis, Chronic Liver Disease(CLD),Liver Cirrhosis, ascites & PH, Gastric &Esophageal Carcinoma, Hepatocellular Carcinoma	Able to introduce himself and polite with the patient Able to extract relevant information Takes informed consent Takes detailed history	10 (10%)

		Nephrology • Renal Failure (ARF), Chronic Kidney Disease (CKD), Urinary Tract Infection (UTI) Water & Electrolyte disorders, Acid- Base disorders		
2	Long case Examination	Respiratory system, GIT and Nephrology (same as above)	Takes informed consent Uses correct clinical methods systemically including appropriate exposure and redrape Able to pick clinical sign present in the Patient	10 (10%)
3	Long case Discussion/viva-voce	Respiratory system, GIT and Nephrology (same as above)	Presents skillfully Gives correct findings Gives logical interpretation of	10 (10%)

			findings and differential diagnosis Enumerate and justify relevant investigation Outline the treatment plan	
4	Short case Respiratory system	Pleural effusion, Consolidation, lung collapse, COPD, Bronchogenic CA, Bronchiectasis, Lung fibrosis, Pneumothorax	Perform proper and concerned relevant clinical examination according to instructions given in professional manner Systematic and appropriate application of clinical methods Able to pick correct signs Logically interprets the clinical findings	10 (10%)

			Justifies diagnosis Make an appropriate management plan	
5	Short case GIT	Hepatomegaly, Splenomegaly, hepatosplenomegaly, Ascites, Jaundice, Cirrhosis	Perform proper and concerned relevant clinical examination according to instructions given in professional manner Systematic and appropriate application of clinical methods Able to pick correct signs Logically interprets the clinical findings Justifies diagnosis Make an appropriate management plan	10 (10%)

6	Logbook/workbook	Complete logbook with all columns filled including daily topic discussed, long case presented, morning report, procedures, investigations Complete workbook with five histories and morning reports checked and signed		10 (10%)
7	Instruments	ETT, Ambu bag, LP needle, BMB needle, oropharyngeal airway, NG tube, Foleys catheter, IV cannulas, Central venous line, Laryngoscope, chest tube	Able to identify the instrument, describes indications, contraindications and complications	10 (10%)
8	X-ray	CXR of consolidation, pleural effusion, fibrosis, cavitation, cardiac failure, mediastinal and hilar lymphadenopathy	Able to identify findings, give diagnosis and differential diagnosis, enumerate complications and briefly describes Treatment	10 (10%)
9	Counseling	Breaking bad news, Needle prick injuries, Initiation of ATT, Initiation of ATT and other drugs in pregnancy, Counseling regarding pregnancy related medical issues	Able to counsel the patient focusing on autonomy, confidentiality, beneficence,	10 (10%)

			justice, no harm and safety net etc	
10	BLS	Performance of BLS steps on simulator and related viva	Able to perform BLS according to recent AHA Guidelines	10 (10%)
Total marks100				
WT marks will be rounded to 10 for inclusion in Internal Assessment				
Similar Framework will be utilized by Other Medical and Specialty Units				

- 50% marks are mandatory in Station 1-5 to pass Ward Test.

Recommended Resources

(Bold ones are essential)

1. **Kumar and Clark's Clinical Medicine, 10th Edition, 2020**
2. **Davidson's Principles and Practice of MEDICINE, 23rd edition2018**
3. **Videos on clinical skills available on NEJM website, free online.**
4. **MacLeod's Clinical Examination. Churchill Livingstone. 14th Edition2018**
5. **Clinical Examination by Nicholas Talley & Simon O'Connor. Elsevier. 9th Edition 2020**
6. MacLeod's Clinical Diagnosis by Alan G Japp & Colin Robertson Elsevier, 2nd Edition2017
7. Medical Statistics Made Easy, Harris & Taylor. Churchill Livingstone, 2nd Edition,2008
8. ABC of Practical Procedures by Tim Nutbeam and Ron Daniels: Blackwell Publishing, BMJ Books, UK,2010
9. RAPID ACLS by Barbara Aehlert: Elsevier Revised 2nd Edition2012
10. Kaplan USMLE Step-2 CK Lecture Notes

11. Current Medical Diagnosis & Treatment, 61st Edition,2022

12. Cecil's Essentials of MEDICINE: By Andreoli and Carpenter, 10th edition2021

13. Clinical Medicine, A Clerking Companion: By Randall & Feather, OUP2011

14. 14.Oxford American Handbook of Clinical Medicine, OUP, 10th edition2017

15. Davidson's 100 clinical cases. Churchill Livingstone. 2nd Edition,2012

16. Oxford Handbook of Clinical diagnosis. Oxford University Press. 10th Edition2017

17. Problem Based Medical Diagnosis (POMD) By John Friedman 7th Edition2003

18. The Patient History: An Evidence-Based Approach to Differential Diagnosis by Henderson, Tierney and Smetana. McGraw Hill Medical. 2nd Edition2012

19. Mechanisms of Clinical Signs by Dennis, Bowen and Cho. Churchill Livingstone. 2020, 3rdedition

20. The Rational Clinical Examination. JAMA Evidence.2009

21. Tutorials in Differential Diagnosis (Beck tutorials) by Beck and Souhami. 4th Edition2004

22. How to read a paper, Trisha Greenhalgh. BMJ books, 6th Edition,2019

Acknowledgement

It is acknowledged that many of the components of this document have been extracted/modified from,

- Clinical clerkship. UNM Course Type Glossary.
- Barsukiewicz, Camille K.; Raffel, Marshall W.; Raffel, Norma K. (2010). The U.S. Health System: Origins and Functions, Sixth edition. Clifton Park, NY: Cengage Learning. p. 80. ISBN978-1-4180-5298-0.
- Cymet T. "What is a Clinical Clerkship?" American College of Osteopathic Family Physicians. Retrieved 20 February 2022.
- Clinical clerkship. https://en.wikipedia.org/wiki/Clinical_clerkship
- Clerkship Manual in Medicine 2016. Shifa College of Medicine, Islamabad.
- Dow University of Health Sciences, Karachi available at https://www.duhs.edu.pk/download/Final%20Module%20Book-20160514.pdf
- Park SH, Do KH, Kim S, Park JH, Lim YS. What should medical students know about artificial intelligence in medicine? J Educ Eval Health Prof 2019; 16: 18. doi: 10.3352/jeehp.2019.16.18
- Sankarapandian V, Christopher PR. Family medicine in undergraduate medical education in India. J Family Med Prim Care 2014; 3(4):300-4. doi: 10.4103/2249-4863.148087.

Revision/Modifications Details

- 31/12/22- Details of each OSCE station added.
- Addition of UHS assessment and comparison with RMU assessment
- Page numbers added
- 01/01/23- Comparison between RMU and UHS details improvement done
- References added
- 21/01/23- OSCE/Clinical components details improved
- 10/02/23- TOS updated by adding *Five percent (5%) questions may come from any topic
- 8/03/23- Study Guide was revised and updated
- 19/6/23- Assessment document updated based on post examination evaluation. It is now mandatory to obtain 50% marks in Long and Short Cases Stations to pass Clinical Component. Number of SAQs in EBE were increased from 5 to 10 and their distribution revised to avoid selective study issue.