



RAWAL MEDICAL COLLEGE
RAWAL INSTITUTE OF HEALTH
SCIENCES ISLAMABAD

THIRD YEAR MBBS

BATCH 2020 – 2025

STUDY GUIDE

BLOCK IX

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INTRODUCTION

We welcome third year MBBS students to their new academic session. During this session i.e. (Block VIII). Student will learn general concepts of pharmacology, pathology, & Forensic Medicine with some overview Of Medicine, Surgery, Special Sciences, Gynae/obs, Psychiatry and Pediatrics.

Therapeutics is a vibrant field of Medical Sciences that deals with drugs and their clinical uses in a rational manner based on their mode of action, kinetic and adverse effect profile .Pharmacology & Pathology are the preclinical subjects in the medical curriculum, which form an integral link between basic & the clinical sciences. As the horizon of pharmacology has broadened due to expansion of Neurophysiology, Biochemistry, & the newly emerging field of Biochemistry ; in this module the knowledge of sources of drugs , their trans membrane permeation & partitioning across body membrane , their distribution & redistribution to various body compartments , their biotransformation & elimination will be shared. Pharmacology involving various receptor interaction, adverse effect profile, toxicities & drug interaction, all of which are important determinants of rational drug therapies will also be learnt. To enhance student's participation as active learners and to develop their skills of continuous medical education (CME), updates on pharmacological news, small projects, and presentations will be carried out throughout the session. Students will be awarded with score in internal assessment and certificates as incentives for participating in such activities.

In Pathology students will be introduced about General Pathology and Microbiology. The Microbiology session will cover basic bacteriology, immunity, cellular basic of immune response. Antibiotics and bacterial genetics. General pathology involves the study of the mechanism behind cell and tissues injury as well as understanding how the body responds to and repairs injury. Examples of areas that may be studied include necrosis, neoplastic wound healing, inflammation and how cells adapt to injury. Through understanding in these areas is applied in the diagnosis of disease. In hematology, the students will get familiar with different disease aspects that affect the blood, including bleeding disorder. Clotting problems, and anemias. In the systemic Pathology major the students will learn to investigate consequences of injury to different organs and systems of the body.

Forensic Medicine (also commonly known as Medical Jurisprudence) is also an essential subject for undergraduate medical students in Pakistan. Because medico- legal duties are required to be perform by the general medical officer under the law of Pakistan, the medical student is expected to know the major legal aspect of the profession and his legal duties towards the state, especially in documenting evidence injury, assault, poisoning, and criminal or suspicious deaths. The subject of medical ethics is a sub-component of forensic medicine. In addition, the forensic aspect of toxicology constitute an integral part of the subject. The subject of the forensic medicine (Medical Jurisprudence) and Medical Ethics is also required by the World Federation for Medical Education (WFME) to be essentially incorporated in curriculum of Basic medical education.

General Learning Objectives:

By the end of this module, the students will be able to:

- ❖ Describe the detailed features of cell injury, inflammation and immunology and concepts of bacteriology and microbiology.
- ❖ Explain the neoplasia, molecular basis of cancer, pathways of spread & lab diagnosis.
- ❖ Describe various terminologies related to general pharmacology and concepts of pharmacokinetics & pharmacodynamics.
- ❖ Identify and describe different drug classes acting on autonomic nervous system.
- ❖ Explain the pathology of hematopoietic system and details of drugs used to treat various hematopoietic disorders.
- ❖ Define the role of doctor in the medico legal system.
- ❖ Document information for legal procedures, and write certification of death according to will guidelines.
- ❖ Maintain highest ethical principles in medical examination while obtaining consent, euthanast biomedical research etc. in keeping with the norms of society.
- ❖ Describe methods for assessment of fatal period, postmortem interval and autopsy procedures.

Teaching / Learning Methods:

The teaching and learning session of this module will be of diverse types:

- Large group interactive sessions (LGIS)
- Small group teaching (SGD) will include tutorials.
- Practical sessions will comprise of practical laboratory demonstrations and performance.
- Seminars: on different topics, in which student will make oral presentation in different aspects of the allocated topics.
- Self-directed learning sessions (SDL): This is the time during which students are expected to revise what they have learnt in the class, clear their concepts by consulting different text books, reference material and prepare their assignment and projects.
- Problem Based Learning (PBL)
- Case Based Learning (CBL)

Students Assessment:

- At the end of module 1 and 2 there will be an examination which will comprise of written assessment of three duration comprising

One best type of multiple choice questions (MCQs)

- At the of block IX, Assessment will include both the:

- Theory paper
- Practical / Lab examination

The practical examination will comprise of objective structured practical examination (OSPE) and viva voce. The OSPE will include both observed and non- observed stations.

The OSPE / Viva voice will be conducted in batches. The students will be having OSPE / Practical labs in the subjects of Pathology. Pharmacology and Forensic Medicine.

➤ **Seminars:**

Assessment of seminar presentation will be done in the following categories.

<i>Seminar Presentation</i>								
Student Name	Seminar Topic	Facilitator	Marks					
			Subject Knowledge (05)	Body Language (01)	Interaction With audience (01)	Standard of presentation (02)	Delivery Style (0.5)	Attitude Towards Questioning (0.5)

Study Guide

Block – IX

Module – VII GIT, SKIN, MUSCULOSKELETAL

PATHOLOGY

Sr.no.	Learning objective by the end of the session, student will be able to	Content area Module – 7 GIT	Teaching Activity	Assessment
1)	<p>GIT <u>Stomach</u> Describe pathogenesis, brief clinical features, prevention and diagnosis of</p> <p>GASTRITIS</p>	<p><u>MICROBIOLOGY</u></p> <ul style="list-style-type: none"> ❖ H. Pylori 	LGIS 2 HRS + SDG 2 HRS	MCQs SEQs SAQs VIVA
2)	<p><u>LIVER</u> Describe the pathogenesis, Brief clinical features, prevention and diagnosis of</p> <p>Hepatitis & Liver abscess</p>	<ul style="list-style-type: none"> ❖ Hepatitis (A,B,C,D & E) ❖ Liver Abscess (Amoebiasis) 	LGIS 2 HRS	MCQs SEQs SAQs VIVA
3)	<p><u>INTESTINES</u> Describe the pathogenesis, Brief clinical features, prevention and diagnosis of Organisms causing Infectious Diarrhoea/Dysentery</p>	<p><u>Bacteria</u></p> <ul style="list-style-type: none"> ❖ Salmonella, Shigella, Vibrio cholera, Escherichia coli, Campylobacter, Yersinia enterocolitica, Vibrio parahaemolyticus <p><u>Viruses</u></p> <ul style="list-style-type: none"> ❖ Rota virus, Adenovirus <p><u>Parasites</u></p> <ul style="list-style-type: none"> ❖ Cryptosporidium, Giardia lamblia ❖ Entamoeba histolytica <p>Organism causing food poisoning</p> <ul style="list-style-type: none"> ❖ Staphylococcus aureus ❖ Clostridium perfringens ❖ Clostridium Botulinum ❖ Baccillus cereus <p>PRACTICAL: 02 HRS Stool routine examination</p>	LGIS 2 HRS + SGD 2 HRS	MCQs SEQs SAQs VIVA

Sr.no.	Learning objective by the end of the session, student will be able to	<u>Content area</u>	Teaching Activity	Assessment
1)	<p>Oral Cavity Describe the etiology, pathogenesis and morphological features of leukoplakia and erythroplakia.</p> <p>Discuss the risk factor, pathogenesis, morphological characteristics of carcinoma of oral cavity.</p> <p>List the causes of salivary gland swellings / Tumors.</p>	<p>Oral Cavity</p> <ul style="list-style-type: none"> ➤ Inflammatory lesions ➤ Pre-malignant lesions ➤ Salivary gland tumors ➤ Tumors of oral cavity 	<p>LGIS 2 HR + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
2)	<p>Esophagus Discuss the pathogenesis and complications of gastro-esophageal reflux disease (GERD).</p> <p>Describe the etiology, morphological features and clinical course of carcinoma of esophagus.</p>	<p>Esophagus</p> <ul style="list-style-type: none"> ➤ Reflux disease ➤ Inflammatory lesions ➤ Tumors 	<p>LGIS 2 HR</p>	<p>MCQs SEQs SAQs VIVA</p>
3)	<p>Stomach List the condition causing dyspepsia</p> <p>Describe the etiology and pathogenesis of acute and chronic gastritis.</p> <p>Discuss the etiology, pathogenesis, morphological and clinical features of peptic ulcer</p> <p>Describe the etiology, pathogenesis, morphological and clinical features of carcinoma of stomach.</p>	<p>Stomach</p> <ul style="list-style-type: none"> ➤ Dyspepsia ➤ Gastritis ➤ Ulcer ➤ Tumors 	<p>LGIS 2 HR + SGD 2 HR</p>	<p>MCQs SEQs SAQs VIVA</p>
4)	<p>Intestine Describe the pathogenesis mechanisms involved in the production of malabsorption syndromes, their clinical features and diagnostic modalities.</p> <p>Compare and contrast Crohn's disease and ulcerative colitis with respect to:</p> <ul style="list-style-type: none"> ❖ Pathogenesis ❖ Clinical features ❖ Gross and microscopic characteristics 	<p>Intestine</p> <ul style="list-style-type: none"> ➤ Inflammatory lesions ➤ Malabsorption ➤ Polyps ➤ IBD <p>Relevant Diagnostic tests</p>	<p>LGIS 2HR + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>

	<ul style="list-style-type: none"> ❖ Extra intestinal manifestations ❖ Complications <p>Discuss irritable bowel syndrome (IBS) with clinical presentation.</p>			
5)	<p>Intestine</p> <p>Classify non-neoplastic and neoplastic polyps of intestinal tract.</p> <p>Discuss risk factors, pathogenesis, clinical and morphological features, and methods of diagnosis, natural history and prevention of colorectal carcinoma.</p> <p>Discuss the etiology, pathogenesis, morphology, clinical features and complications of acute appendicitis.</p>	<p>Intestine</p> <ul style="list-style-type: none"> ➤ Tumors ➤ Appendicitis <p>Relevant Diagnostic tests</p>	<p>LGIS 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
6)	<p>Liver</p> <p>Describe the type, cause, clinical features and diagnosis of jaundice.</p> <p>Differentiate between intrahepatic and extrahepatic biliary obstruction.</p> <p>List the cause, morphology and clinical features of hepatic failure and discuss its complications.</p>	<p>Liver</p> <ul style="list-style-type: none"> ➤ Jaundice ➤ Hepatic failure 	<p>LGIS 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
7)	<p>List the common causes of cirrhosis and differentiate between primary and secondary biliary cirrhosis.</p> <p>Describe the pathogenesis of cirrhosis.</p> <p>Discuss the complications of cirrhosis (Progressive liver failure, portal hypertension, hepatocellular carcinoma).</p>	<p>Liver</p> <ul style="list-style-type: none"> ➤ Cirrhosis 	<p>LGIS 2HR + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
8)	<p>Differentiate between viral hepatitis A,B,C,D and E with respect to:</p> <ul style="list-style-type: none"> ❖ Route of transmission ❖ Incubation period ❖ Clinical features ❖ Complications 	<p>Liver</p> <ul style="list-style-type: none"> ➤ Hepatitis (Acute, Chronic) ➤ Liver abscess 	<p>LGIS 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>

	<p>Discuss the carrier state and differentiate between acute and chronic hepatitis.</p> <p>Describe the pathogenesis, clinical and morphological features of liver abscess.</p>			
9)	<p>Describe the pathogenesis, morphological and clinical features of hemochromatosis.</p> <p>Describe the clinical and morphological characteristics of Wilson's disease and alpha-1 antitrypsin deficiency.</p> <p>Discuss the epidemiology, etiology, and pathogenesis, morphological and clinical features of hepatocellular carcinoma.</p>	<p>Liver</p> <ul style="list-style-type: none"> ➤ Storage disorders ➤ Metabolic disorders ➤ Tumors 	<p>LGIS 2HR + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
10)	<p>Biliary tract</p> <p>Describe the risk factors, pathogenesis and complications of cholelithiasis.</p> <p>Describe the morphology and clinical features of acute and chronic cholecystitis.</p> <p>Describe the clinical features and morphological changes seen in carcinoma of gall bladder.</p>	<p>Biliary tract</p> <ul style="list-style-type: none"> ➤ Cholelithiasis ➤ Cholecystitis ➤ Tumors <p>Relevant Diagnostic tests</p>	<p>LGIS 2HR + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
11)	<p>Pancreas</p> <p>Describe the etiology, pathogenesis, clinical and morphological features of acute pancreatitis.</p> <p>Discuss the etiology, pathogenesis, clinical and morphological features of chronic pancreatitis.</p> <p>Describe the morphological and clinical features of carcinoma of pancreas.</p>	<p>Pancreas</p> <ul style="list-style-type: none"> ➤ Pancreatitis ➤ Tumors <p>Relevant Diagnostic tests</p> <p>PRACTICALS: 06 HRS</p> <ul style="list-style-type: none"> ❖ Acute and Chronic Gastritis ❖ Gastric carcinoma ❖ Ulcerative colitis, Crohn's, disease ❖ Fatty liver ❖ Cirrhosis of liver ❖ Intestinal polyps and colorectal carcinoma 	<p>LGIS 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>

Sr.no.	Learning objective by the end of the session, student will be able to	<u>Content area</u>	Teaching Activity	Assessment
1)	Skin & Soft Tissue Infection Describe the pathogenesis, Brief clinical features, prevention and diagnosis of Fever & Rash Staphylococcal skin infections Streptococcal skin infections Burns Gas gangrene Leprosy	(Maculopapular (Measles, Herpes, Chicken pox) Rubella B19, HIV, Dengue Typhoid / Paratyphoid, Typhus, Spotted, fever, Leptospirosis) Erythematous (Scarlet fever, TSS, Purpuric) (Meningococemia, VHF) Papulovesicular/pustular)(Zoster, Rickettsia pox, Sec. Syphilis) <ul style="list-style-type: none"> • Pseudomonas • Clostridium 	LGIS 2HR + SGD 2HR	MCQs SEQs SAQs VIVA
2)	Scabies & Louse Infestations S/c Mycoses	<ul style="list-style-type: none"> • Mycobacterium Leprae • Rickettsia • Dermatophytes • Mycetoma 	LGIS 2HR + SGD 2HR	MCQs SEQs SAQs VIVA
3)	Bone and Joint Infections Describe the pathogenesis, Brief clinical features, prevention and diagnosis of OSTEOMYELITIS Pott's Disease Prosthetic joint infections	Staphylococcus Aureus Osteomyelitis in cat bite <ul style="list-style-type: none"> • Pasteurella multocida Osteomyelitis in Sickle cell anemia <ul style="list-style-type: none"> • Salmonella multocida Fungal osteomyelitis <ul style="list-style-type: none"> • Mycobacterium tuberculosis • Staphylococcus epidermidis (hip or knee prosthesis) • Propionibacterium acne • Pseudomonas, Serratia, Candida (in i/v drug users) 	LGIS 2HR SGD 2HRS	MCQs SEQs SAQs VIVA
4)	Describe the pathogenesis, Brief clinical features, prevention and diagnosis of Infectious Arthritis	Organisms Causing Infectious Arthritis <ul style="list-style-type: none"> ➤ Neonates Streptococcus agaalctiae ➤ Children and adults Staph aureus ➤ Sexually active adults Neisseria gonorrhoeae ➤ Prosthetic hip and knee joint S.aureus ➤ Intravenous drug users ➤ Staphylococcus aureus Pseudomonas aeruginosa 	LGIS 2HR + SGD 2HR	MCQs SEQs SAQs VIVA

5)	Describe the pathogenesis, Brief clinical features, prevention and diagnosis of (Immune Complex Arthritis)	VIRAL (IMMUNE COMPLEX) ARTHRITIS: <ul style="list-style-type: none"> ➤ Rubella virus (natural infections & immunization) ➤ Parvovirus B-19? ➤ Chronic Hepatitis C ➤ IV. Hepatitis B Arbovirus (Dengue virus) 	LGIS 2HR + SGD 2HR	MCQs SEQs SAQs VIVA
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Sr.no.	Learning objective by the end of the session, student will be able to	Content area	Teaching Activity	Assessment
1.	<p><u>SKIN</u></p> <p>Define the common terms and lesions of the skin.</p> <p>Describe the morphological and clinical features of urticarial/eczema.</p> <p>Describe the pathogenesis, morphology and clinical features of dermatitis.</p>	<p>SKIN</p> <ul style="list-style-type: none"> ➤ Inflammatory lesions <p>Relevant diagnostic tests</p>	LGIS 2HR	MCQs VIVA
2.	<p>Classify bullous (blistering) lesions with their peculiar morphological features.</p> <p>Classify verrucous lesions.</p>	<p>SKIN</p> <ul style="list-style-type: none"> ➤ Bullous lesions ➤ Verrucous lesions <p>Relevant diagnostic tests</p>	LGIS 2HR + SGD 2HR	MCQs SEQs SAQs VIVA
3.	<p>Discuss the causative agents and clinical features of impetigo and scabies.</p> <p>Classify pigmented and non-pigmented skin tumor.</p> <p>Describe the morphological and clinical features of Nevus.</p>	<p>SKIN</p> <ul style="list-style-type: none"> ➤ Impetigo and scabies ➤ Pigmented lesions <p>Relevant diagnostic tests</p>	LGIS 2HR	MCQs VIVA
4.	<p>Describe malignant melanoma with respect to its location, clinical and morphological features.</p> <p>Describe the clinical and morphological features of basal cell carcinoma.</p> <p>Describe the clinical and morphological features of squamous cell carcinoma.</p>	<ul style="list-style-type: none"> ➤ Pigmented lesions (Melanoma) ➤ Tumors (Squamous cell CA, Basal cell CA) <p>Relevant diagnostic tests</p> <p>PRACTICAL: 02 HRS</p> <ul style="list-style-type: none"> ➤ Skin tumors 	LGIS 2HR + SGD 2HR	MCQs VIVA

Pharmacology

Block – VIII

Module - IV

Sr.no.	Learning objective by the end of the session, student will be able to	<u>Content area</u>	Teaching Activity	Assessment
1)	Describe pharmacology of emetics and antiemetic drugs.	<ul style="list-style-type: none"> ❖ Classification of antiemetic drugs ❖ Mode of action of antiemetic drugs ❖ Therapeutic uses of antiemetic drugs ❖ Adverse effects of antiemetic drugs 	SGD 02 hour	MCQs SEQs VIVA
2)	Describe the pharmacokinetics and dynamic of drugs used to treat acid peptic disease.	<ul style="list-style-type: none"> ❖ Drug treatment of acid peptic disease ❖ Classification of drugs used in acid peptic disease ❖ Mode of action of different group of drugs used in acid peptic disease ❖ Therapeutic uses of drug used in acid peptic disease ❖ Adverse effects of drug used in acid peptic disease 	LGIS 03 hour	MCQs SEQs VIVA
3)	Describe the pharmacokinetics and dynamic of purgatives.	<ul style="list-style-type: none"> ❖ Classification of purgatives ❖ Purgatives on the basis of their mechanism of action ❖ Mode of action of purgatives ❖ Therapeutic uses of purgatives ❖ Adverse effects of purgatives 	SGD 02 hour	MCQs SEQs VIVA
4)	Describe the pharmacology of anti-diarrheal drugs in detail.	<ul style="list-style-type: none"> ❖ Classification of anti-diarrheal drugs ❖ Mode of action of anti-diarrheal drugs ❖ Therapeutic uses of anti-diarrheal drugs ❖ Adverse effects of anti-diarrheal drugs 	SGD 02 hour	MCQs SEQs VIVA
5)	Describe in detail pharmacology of drugs used in treatment of inflammatory bowel disease.	<ul style="list-style-type: none"> ❖ Classification of drugs used in treatment of inflammatory bowel disease ❖ Mode of action of different group of drugs used in treatment of inflammatory bowel disease 	LGIS 02 hour	MCQs SEQs VIVA

		<ul style="list-style-type: none"> ❖ Therapeutic uses of drugs used in inflammatory bowel disease ❖ Adverse effects of drugs used in treatment of inflammatory bowel disease 		
6)	Explain the pharmacology of prokinetic agents.	<ul style="list-style-type: none"> ❖ Classification of prokinetic agents ❖ Mode of action of prokinetic agents ❖ Therapeutic uses of prokinetic agents ❖ Adverse effects of prokinetic agents 	SGD 02 hour	MCQs SEQs VIVA
7)	Describe in detail drugs used in the treatment of irritable bowel syndrome.	<ul style="list-style-type: none"> ❖ Classification of drugs used in the treatment of irritable bowel syndrome ❖ Mode of action of drugs used in the treatment of irritable bowel syndrome ❖ Therapeutic uses of drugs in the treatment of irritable bowel syndrome ❖ Adverse effects of drugs used in the treatment of irritable bowel syndrome 	LGIS 02 hour	MCQs SEQs VIVA
8)	Describe in detail drugs used to treat skin disorders.	<ul style="list-style-type: none"> ❖ Classification of drugs used for skin disorders ❖ Mode of action of drugs used for skin disorders ❖ Therapeutic uses of drugs used for skin disorders ❖ Adverse effects of drugs used for skin disorders 	SGD 02 hour	MCQs SEQs VIVA
9)	Describe in detail different drugs used for skeletal muscle relaxants.	<ul style="list-style-type: none"> ❖ Classification of drugs used for skeletal muscle relaxants ❖ Mode of action of drugs used for skeletal muscle relaxants ❖ Therapeutic uses of drugs used for skeletal muscle relaxants ❖ Adverse effects of drugs used for skeletal muscle relaxant <p>PRACTICAL:</p> <ul style="list-style-type: none"> ➤ Identification of drug formulation: ➤ Mention the group, generic name, brand name and clinical uses of given specimen of drug ➤ Prescription writing for: <ul style="list-style-type: none"> ➤ Diarrheas ➤ Ascariasis ➤ Scabies ➤ Dyspepsia ➤ GERD ➤ Management of dengue fever ➤ Clinico-Pharmacological seminar in rational drug therapy for: <ul style="list-style-type: none"> • Management of peptic ulcer disease 	LGIS 02 hour	MCQs SEQs VIVA

- Management of GERD
- Treatment of amoebic liver abscess
- Management of rheumatoid arthritis and osteoarthritis
- Role of skeletal muscle relaxants in anesthesia, ECT, etc.
- Management of gouty arthritis
- Management of schistosomiasis.

Forensic Medicine

Sr.no.	Learning objective by the end of the session, student will be able to	<u>Content area</u>	Teaching Activity	Assessment
1.	Battered Baby <ul style="list-style-type: none"> • Discuss the features and medico legal aspect of battered baby. 	Diagnosis and medico legal aspects of battered baby.	LGIS 02 hour	MCQs SEQs VIVA OSPE
2.	Infanticide <ul style="list-style-type: none"> ➤ Define infanticide, dead born, still born. ➤ Discuss the findings of dead born. ➤ Differentiate still born from live birth. ➤ Describe the causes of death in infanticide. 	<ul style="list-style-type: none"> ➤ Postmortem findings ➤ Causes of death 	LGIS 02 hour	MCQs SEQs VIVA OSPE
3.	Thermal Injuries <ul style="list-style-type: none"> • Describe the types of thermal injuries. • Describe autopsy findings, causes of death and medico legal significance of thermal injuries. • 	<ul style="list-style-type: none"> ➤ Characteristics of thermal injuries ➤ Autopsy findings ➤ Medico legal aspects of burns and scalds 	LGIS 02 hour	MCQs SEQs SAQs VIVA OSPE
4.	Electrical Injuries <ul style="list-style-type: none"> • Describe mechanism, features, postmortem findings in low voltage and high voltage electrical injuries. 	<ul style="list-style-type: none"> ➤ Mechanism, features, postmortem findings in low voltage and high voltage electrical injuries. 	LGIS 02 hour	MCQs SEQs SAQs VIVA
5.	Death due to heat and cold <ul style="list-style-type: none"> • Describe hyperthermia, 	<ul style="list-style-type: none"> • Characteristic features in hyperthermia, hypothermic and lightning injuries • Autopsy findings 		MCQs SEQs SAQs VIVA OSPE

	<p>hypothermic and lightning injuries.</p> <ul style="list-style-type: none"> Enlist autopsy findings and their medico legal significance. 		SGD 02 hour	
6.	<p>Trace evidence</p> <ul style="list-style-type: none"> Define trace evidence and Lockard's principle. Describe medico legal importance and method of detection of trace evidence. 	<ul style="list-style-type: none"> Forensic examination of biological fluids, stains and other material 	SGD 02 hour	MCQs SEQs SAQs VIVA OSPE
7.	Explain the commonly performed laboratory test of biological stains.		Practical 02 hour	MCQs SEQs SAQs VIVA
8.	<p>Vegetable Poisons</p> <ul style="list-style-type: none"> Describe the clinical features, diagnosis, treatment, postmortem appearance and medico legal significance of Vegetable poisons. 	<ul style="list-style-type: none"> Ricinus COMMUNIS Croton tiglium Abrus PRECATORIUS Colocynth Ergot Capsicum Semecarpus anacardium Calotropis Plumbago 	SGD 03 hour	MCQs SEQs SAQs VIVA OSPE
9.	<ul style="list-style-type: none"> Describe the clinical features, diagnosis, treatment, postmortem appearance and medico legal significance of vegetable poisons. 	<ul style="list-style-type: none"> Belladonna & Hyoscyamus. Digitalis. Ergot. Tobacco. Oleander. Mushrooms. 	LGIS 2 hours	MCQs SEQs SAQs VIVA OSPE
10.	<p>Animal Poisons</p> <ul style="list-style-type: none"> Describe the clinical features, diagnosis, treatment, postmortem appearance and medico legal significance of snake, scorpions poisoning. 	<ul style="list-style-type: none"> Poisonous & non-poisonous snakes Types of venom Treatment Medico legal aspects 	LGIS 1 hours	MCQs SEQs SAQs VIVA OSPE
11.	<p>Mechanical Poison</p> <ul style="list-style-type: none"> Describe the clinical features, diagnosis, treatment, postmortem appearance and medico legal significance of powdered glass. 	<ul style="list-style-type: none"> Powdered glass 	SGD 01 hours	MCQs SEQs SAQs VIVA OSPE
12.	<p>Forensic Pharmacology</p> <ul style="list-style-type: none"> Describe the clinical features, diagnosis, 	<ul style="list-style-type: none"> Medico legal aspects analgesics and antipyretic. Antihistamine. 	SGD 02 hours	MCQs SEQs SAQs VIVA OSPE

	treatment, postmortem appearance and medico legal significance of analgesics and antipyretics.			
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Module 8

Renal and Nervous System

Block- IX

Module –VIII Renal and Nervous System

Pathology

Sr.no.	Learning objective by the end of the session, student will be able to	Content area	Teaching Activity	Assessment
1)	<p>CNS Infection</p> <ul style="list-style-type: none"> Describe the pathogenesis, Brief clinical features, prevention and diagnosis of Bacterial Meningitis. <p>Brain abscess</p>	<p>Microbiology</p> <p>Neisseria Meningitides Hemophilus Influenza MTB Anaerobes</p>	<p>LGIS 2HR</p>	<p>MCQs SEQs SAQs VIVA</p>
2)	<p>Describe the pathogenesis, Brief clinical features, prevention and diagnosis of</p> <p>Viral, Meningitis/ Encephalitis Parasitic Fungal Meningitis</p>	<p>Virology</p> <p>Viral</p> <p>Polio virus Rabies virus</p> <p>PARASITOLOGY MYCOLOGY</p> <p>PRACTICAL: 2 HOURS</p> <p>Laboratory Examination of Cerebrospinal fluid</p>	<p>LGIS 2HRS + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
3)	<p>Urinary tract Infection Describe the pathogenesis, Brief clinical features, prevention and diagnosis</p> <p>Upper UTI</p>	<p>Microbiology</p> <p>Enteric gram-negative rods</p> <p>Organism causing Cystitis / Pyelonephritis / Asymptomatic Bacteriuria</p> <p>E. coli, Klebsiella, Proteus,</p>	<p>LGIS 2HRS + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
4)	<p>Describe the pathogenesis, Brief clinical features, prevention and diagnosis lower UTI</p>	<p>Pseudomonas aeruginosa, Enterococcus, Staph saprophyticus, Candida sp, adenovirus, (Schistosoma and Parasites)</p> <p>PRACTICAL: 2 HOURS</p> <p>Urine Routine Examination Urine culture</p>		

Sr.no.	Learning objective by the end of the session, student will be able to	<u>Content area</u>	Teaching Activity	Assessment
1)	<p><u>CNS</u></p> <ul style="list-style-type: none"> Describe the etiology, morphology and clinical features of brain infarct. Compare and contrast epidural, subdural, and sub-arachnoid hemorrhage with respect to etiology, clinical presentation and prognosis. Describe acute and chronic meningitis on the basis of clinical features, ages and CSF findings. 	<p>Central Nervous System</p> <ul style="list-style-type: none"> ❖ Hemorrhages ❖ Infarction ❖ Meningitis <p>Relevant diagnosis tests</p>	<p>LGIS 02 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
2)	<ul style="list-style-type: none"> Discuss the etiology, clinical features and morphology of brain abscess. List the causative organisms of viral encephalitis and discuss its pathogenesis. List the neurodegenerative diseases causing dementia. Discuss the pathogenesis, morphology and clinical course of Alzheimer's disease and differentiate this from senile dementia associated with aging. 	<p>Central Nervous System</p> <ul style="list-style-type: none"> ❖ Brain abscess ❖ Viral encephalitis ❖ Alzheimer's disease <p>Relevant diagnosis tests</p>	<p>LGIS 02 HRS +SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
3)	<ul style="list-style-type: none"> List the neurological disorders associated with demyelination. Describe the pathogenesis of multiple sclerosis. Describe the types of peripheral neuropathies. 	<p>Central Nervous System</p> <ul style="list-style-type: none"> ❖ Multiple sclerosis ❖ Peripheral neuropathies <p>Relevant diagnosis tests</p>	<p>LGIS 02 hour</p>	<p>MCQs SEQs SAQs VIVA</p>

4)	<ul style="list-style-type: none"> Classify intracranial tumors and describe the clinic-pathological features of astrocytoma, Oligodendroglioma, Ependymoma, Medulloblastoma and Meningioma. Describe the pathogenesis, morphology and clinical features of neurofibromas and schwannomas. 	<p>Central Nervous System</p> <ul style="list-style-type: none"> ❖ Tumors <p>Relevant diagnosis tests</p> <p>Practical: 2hours</p> <p>CNS tumors</p>	<p>LGIS 02 HRS +SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
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Sr.no.	Learning objective by the end of the session, student will be able to	<u>Content area</u> Module – 8 <u>Renal System</u>	Teaching Activity	Assessment
1)	<p>Discuss the etiology, pathogenesis and diagnostic evaluation of proteinuria and hematuria.</p> <p>What is nephrotic syndrome? Enumerate types with etiological, morphological, clinical features of all types.</p>	<p>Urinary System</p> <ul style="list-style-type: none"> ❖ Nephrotic Syndrome ❖ Nephritic Syndrome 	<p>LGIS 02 HRS + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
2)	<p>Describe the etiology and pathogenesis of glomerulonephritis (Nephritis syndrome).</p> <p>Differentiate between nephrotic and nephritic syndromes.</p>	<p>Urinary System</p> <ul style="list-style-type: none"> ❖ Nephrotic Syndrome ❖ Nephritic Syndrome 	<p>LGIS 02 HRS + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
3)	<p>Classify cystic diseases and tumors of kidney.</p> <p>Describe the epidemiology, morphology and clinical features of renal cell carcinoma.</p>	<p>Urinary System</p> <ul style="list-style-type: none"> ❖ Renal Cysts and Tumors 	<p>LGIS 02 HRS + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
4)	<p>Describe acute and chronic renal failure with respect to the etiology, pathogenesis, clinical/ diagnostic features and prognosis.</p> <p>Discuss the causes, clinical features and complications of hydronephrosis and pyelonephritis.</p> <p>Describe various types of renal stones, their etio-pathogenesis, clinical features and diagnosis.</p> <p>Describe acute and chronic pyelonephritis with respect to their etiology, pathogenesis, morphology, clinical features and complications.</p>	<p>Urinary System</p> <ul style="list-style-type: none"> ❖ Renal Failure ❖ Pyelonephritis ❖ Renal Stones 	<p>LGIS 02 HRS + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>

5)	<p>Describe the causes, morphology and clinical features of cystitis.</p> <p>Describe clinical features, etiology and morphology of transitional cell carcinoma of urinary bladder.</p> <p>Discuss the clinical features and complications of gonococcal and non-gonococcal urethritis.</p> <p>Interpret urine D/R and C/S findings.</p>	<p>Urinary System</p> <ul style="list-style-type: none"> ❖ Cystitis ❖ Urethritis ❖ Bladder tumors <p>Practical: 4 hours</p> <ul style="list-style-type: none"> ❖ Chronic Glomerulonephritis/End stage kidney ❖ Tumors of kidney 	<p>LGIS 02 HRS + SGD 2 HRS</p>	<p>MCQs SEQs SAQs VIVA</p>
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Pharmacology

Block VIII

Module - 8

Renal & Nervous System

Sr.no.	Learning objective by the end of the session, student will be able to	<u>Content area</u>	Teaching Activity	Assessment
1.	Describe the pharmacology of various types of diuretics.	<ul style="list-style-type: none"> ❖ Classification of diuretics ❖ Mode of action of carbonic anhydrase inhibitors ❖ Mode of action of Thiazide diuretics ❖ Mode of action of loop diuretics ❖ Mode of action of potassium sparing diuretics 	LGIS 02 hour	MCQs SEQs VIVA
2.	Describe in detail therapeutic uses of different types of diuretics.	<ul style="list-style-type: none"> ❖ Therapeutic uses of carbonic anhydrase inhibitors ❖ Therapeutic uses of Thiazide diuretics ❖ Therapeutic uses of loop diuretics ❖ Therapeutic uses of potassium sparing diuretics 	LGIS 02 hour	MCQs SEQs VIVA
3.	Describe adverse effects of different of diuretics.	<ul style="list-style-type: none"> ❖ Adverse effects of carbonic anhydrase inhibitors ❖ Describe adverse effects of Thiazide diuretics ❖ Adverse effects of loop diuretics ❖ Adverse effects of potassium sparing diuretics 	LGIS 02 hour	MCQs SEQs VIVA
4.	Describe the pharmacokinetics and pharmacodynamics of anxiolytics and hypnotics.	<ul style="list-style-type: none"> ❖ Classify Benzodiazepines ❖ Absorption ❖ Distribution ❖ Biotransformation and excretion of benzodiazepines ❖ Mechanism of action ❖ Clinical uses and adverse effects of benzodiazepines ❖ Mechanism of action of triazolam ❖ Alprazolam and flurazepam ❖ Therapeutic uses of alprazolam ❖ Flurazepam and triazolam 	LGIS 03 hour	MCQs SEQs VIVA

		❖ Adverse effects of various benzodiazepines.		
5.	Describe the pharmacokinetics and dynamics of barbiturates.	<ul style="list-style-type: none"> ❖ Classification mechanism of action ❖ Clinical uses and adverse effects of barbiturates ❖ Mechanism of action of thiopental ❖ Secobarbital and phenobarbital ❖ Clinical uses of thiopental ❖ Secobarbital and phenobarbital ❖ Various adverse effects of thiopental ❖ Secobarbital and phenobarbital ❖ Differentiate between benzodiazepines and barbiturates. 	LGIS 03 hour	MCQs SEQs VIVA
6.	Describe the pharmacokinetics and dynamics of various anti-seizure drugs.	<ul style="list-style-type: none"> ❖ Classify anti-seizure drugs, ❖ Mechanism of action and adverse effects of various groups of anti-seizure drugs ❖ Absorption ❖ Distribution ❖ Biotransformation and excretion of carbamazepine, lamotrigine, phenytoin, valproic acid, clonazepam and ethosuxamide ❖ Therapeutic uses and adverse effects of drugs used for tonic-clonic, partial ❖ Absence and myoclonic seizures ❖ Common drug-drug interaction of anti-seizure drugs. 	LGIS 02 hour	MCQs SEQs VIVA
7.	Describe the pharmacology of general Anesthetic drugs.	<ul style="list-style-type: none"> ❖ Classification of general Anesthetic drugs ❖ Mechanism of action of general anesthetic drugs ❖ Merits, demerits and adverse effects of intravenous and inhalational anesthetic agents ❖ Absorption ❖ Distribution ❖ Biotransformation and excretion of nitrous oxide, halothane, and thiopental ❖ Adverse effects of inhaled anesthetic drugs 	LGIS 03 hour	MCQs SEQs VIVA
8.	Describe the pharmacokinetics and pharmacodynamics of intravenous anesthetic agents.	<ul style="list-style-type: none"> ❖ Adverse effects of thiopental, ketamine, propofol, fentanyl, midazolam ❖ Classification of local anesthetic drugs ❖ Pharmacology of local anesthetic drugs ❖ Mechanism of action of esters and amides ❖ Absorption ❖ Distribution 	LGIS 03 hour	MCQs SEQs VIVA

		<ul style="list-style-type: none"> ❖ Biotransformations and excretion of procaine, cocaine tetracaine ❖ Therapeutic uses of esters ❖ Adverse effects of cocaine, procaine, tetracaine, procaine, tetracaine ❖ Absorption ❖ Distribution ❖ Biotransformation and elimination of amides ❖ Therapeutic uses and adverse effects of (bupivacaine, ropivacaine and lidocaine). 		
9.	Describe the pharmacology drugs used to treat parkinsonism.	<ul style="list-style-type: none"> ❖ Classification of drugs used in the treatment of parkinsonism ❖ Mechanism of action of levodopa, bromocriptine, selegiline ❖ Absorption ❖ Distribution ❖ Biotransformation of and excretion of various anti antiparkinsonism drugs ❖ Therapeutic uses of levodopa ❖ Bromocriptine and selegiline, benzotropine ❖ Adverse effect of levodopa ❖ Bromocriptine and selegiline. 	LGIS 03 hour	MCQs SEQs VIVA
10.	Describe the pharmacology of antipsychotic drugs.	<ul style="list-style-type: none"> ❖ Mechanism uses and adverse effect of antipsychotic drugs and lithium. 		MCQs SEQs VIVA
11.	Describe the pharmacokinetics and pharmacodynamics of different groups of antidepressant drugs.	<ul style="list-style-type: none"> ❖ Classification of antidepressant drugs ❖ Various antidepressant drug group according to their mechanism of action ❖ Mechanism of action various antidepressants drugs ❖ Therapeutic uses and mechanism of action of, TCIS, SSRIS, and mono amine oxidase inhibitors ❖ Adverse effects caused by SSRIS, TCIS, and mono amine oxidase inhibitors and 5 hydroxy tryptamine inhibitors 	LGIS 03 hour	MCQs SEQs VIVA
12.	Describe the adverse effects of drugs abuse.	<ul style="list-style-type: none"> ❖ Drug tolerance ❖ Dependence ❖ Abuse along with common drugs of abuse 	SGD 02 HOUR	MCQs SEQs VIVA
13.	Describe the pharmacology of CNS stimulants drugs.	<ul style="list-style-type: none"> ❖ Classification of CNS stimulants drugs ❖ Mechanism of action of various CNS stimulants drugs ❖ Therapeutic uses, and adverse effects of different CNS stimulants drugs ❖ Absorption ❖ Distribution 	SGD 02 HOUR	MCQs SEQs VIVA

		❖ Biotransformation and excretion of drugs stimulating the central nervous system.		
14.	Special Senses:	<ul style="list-style-type: none"> ❖ Classification of drugs used in the treatment of glaucoma ❖ Mechanism of action of various drug used in the treatment of glaucoma ❖ Therapeutic uses and adverse effects of various drugs used in the treatment of glaucoma ❖ Practical: <ul style="list-style-type: none"> ➤ To study the effects of drugs on reflex time in frog ➤ To study the effects of CNS stimulants/depressant drugs in frog ➤ Identification of drug formulation ➤ Mention the class of drug of the specimen provided • Urinary tract infection • Epilepsy • Major depressive disorders ❖ Clinico-pharmacological seminar in rational drug therapy for: <ul style="list-style-type: none"> ➤ Management of major depressive disorders MDD ➤ Pharmacological treatment of schizophrenia ➤ Management of servere pain (angina, pleuritic etc.) ➤ Management of epilepsy ➤ Pharmacological treatment insomnia and anxiety 	SGD 02 HOUR	MCQs SEQs VIVA

Forensic Medicine

Sr.no.	Learning objective by the end of the session, student will be able to	<u>Content area</u> Forensic Medicine & Toxicology (RENAL & NERVOUS SYSTEM)	TEACHING ACTIVITY DURATION	Assessment
1.	Personal identification <ul style="list-style-type: none"> ➤ Enlist parameters of identification. ➤ Explain sex determination in living and dead and intersex states. 	<ul style="list-style-type: none"> ❖ Parameters of identification ❖ Sex determination in living and dead. 	LGIS 01 hour	MCQs SEQs SAQs VIVA OSPE
2.	Race & Age determination in living and dead <ul style="list-style-type: none"> ➤ Describe the different methods of race and age determination. 	<ul style="list-style-type: none"> ❖ Methods of race and age determination through physical examination and bones. ❖ Medico legal importance of age determination 	LGIS 02 hour	MCQs SEQs SAQs VIVA OSPE
3.	Identification through finger printing and DNA <ul style="list-style-type: none"> ➤ Describe the method and role of finger prints, foot prints and Bertillon system in identification of individual. ➤ Discuss DNA fingerprintings and its importance in Forensic Medicine. 	<ul style="list-style-type: none"> ❖ Finger prints ❖ DNA fingerprinting for identification 	LGIS 01 hour	MCQs SEQs SAQs VIVA OSPE
4.	Identification of mutilated, decomposed, burnt bodies and skeletal remains. <ul style="list-style-type: none"> ➤ Determine stature/height from skeletal/bony/fragmentary remains. ➤ Describe the methods of identification of mutilated decomposed, burnt bodies and skeletal and fragmentary remains. 	<ul style="list-style-type: none"> ❖ Identification in mass disaster ❖ Determination of stature / height. 	SGD 02 hour	MCQs SEQs SAQs VIVA OSPE
5.	Forensic Dentistry <ul style="list-style-type: none"> • Describe role of forensic odontology. 	<ul style="list-style-type: none"> ❖ Age, Sex, race and personal identification through teeth ❖ Bite marks analysis 	LGIS 01 hour	MCQs SEQs SAQs VIVA OSPE

6.	Forensic Psychiatry <ul style="list-style-type: none"> ➤ Define lucid interval, hallucination, delusion, illusion feigned mental disorder, and a certifiable mentally sick person. ➤ Differentiate between true and feigned insanity. 	<ul style="list-style-type: none"> ❖ Medico legal aspects of different mental conditions 	SGD 02 hour	MCQs SEQs SAQs VIVA OSPE
7.	Mental Health Act <ul style="list-style-type: none"> ➤ Describe salient features of mental health act 2011. ➤ Explain the procedure to diagnosis and certify a case of mental disorder. ➤ Explain the procedure of restrain of a mentally sick person. 	<ul style="list-style-type: none"> ❖ Procedure to diagnose and certify a case of mental disorder. 	LGIS 01 hour	MCQs SEQs SAQs VIVA OSPE
8.	Diagnosis and certification of mental health <ul style="list-style-type: none"> ➤ Explain the procedure to diagnosis and certify a case of mental disorder. ➤ Explain limitations of civil and criminal responsibilities toward a mentally sick person. 	<ul style="list-style-type: none"> ❖ Civil criminal responsibilities of mentally ill person ❖ Testamentary capacity 	LGIS 01 hour	MCQs SEQs SAQs VIVA OSPE
9.	Agrochemical poisons <ul style="list-style-type: none"> ➤ Discuss the clinical features diagnosis management postmortem appearance and medico legal importance of poisoning by organophosphate compound (Insecticides) 	<ul style="list-style-type: none"> ❖ Organophosphate compounds ❖ Chlorinated compounds ❖ Naphthalene ❖ Paraquat (herbicide) 	LGIS 01 hour	MCQs SEQs SAQs VIVA OSPE
10.	Poison acting on spinal cord and peripheral nervous system <ul style="list-style-type: none"> ➤ Describe the clinical features, diagnosis, treatment, postmortem appearance and medico legal significance of spinal & poison acting on peripheral nervous system. 	<ul style="list-style-type: none"> ❖ Strychnos nux vomica ❖ Curare ❖ Conium 	SGD 02 hour	MCQs SEQs SAQs VIVA OSPE
11.	Deliriant poisons <ul style="list-style-type: none"> ➤ Describe the clinical features, diagnosis, treatment, postmortem appearance and medico legal significance of: ➤ Dhatura poisoning ➤ Cannabis indica 	<ul style="list-style-type: none"> ❖ Dhatura poisoning ❖ Cannabis indica 	SGD 02 hour	MCQs SEQs SAQs VIVA OSPE

12.	Somniferous poisons <ul style="list-style-type: none"> ➤ Describe the clinical features, diagnosis, treatment, postmortem appearance and medico legal significance of somniferous poisons. 	<ul style="list-style-type: none"> ❖ Opium and morphine ❖ Heroine 	LGIS 01 hour	MCQs SEQs SAQs VIVA OSPE
13.	Drug abuse <ul style="list-style-type: none"> ➤ Explain drug tolerance, dependence, abuse along with common drug of abuse. 	<ul style="list-style-type: none"> ❖ Drug addiction ❖ Drug abuse deaths ❖ Volatile abuse substance 	LGIS 01 hour	MCQs SEQs SAQs VIVA OSPE
14.	Fuels <ul style="list-style-type: none"> ➤ Describe the clinical features, diagnosis, management and medico legal significance of kerosene oil/petroleum products. 	<ul style="list-style-type: none"> ❖ Petroleum products ❖ Kerosene oil 	SGD 01 hour	MCQs SEQs SAQs VIVA OSPE
15.	CNS Stimulants poisons <ul style="list-style-type: none"> ➤ Describe the mechanism of action, uses and adverse effects CNS stimulants. 	<ul style="list-style-type: none"> ❖ Cocaine ❖ Amphetamines 	SGD 02 hour	MCQs SEQs SAQs VIVA OSPE
16.	Inebriant poison <ul style="list-style-type: none"> ➤ Describe the clinical features, diagnosis, treatment, postmortem appearance and medico legal significance of inebriant poisons ➤ Examination of drunken person ➤ Describe law related to alcohol in Pakistan. 	<ul style="list-style-type: none"> ❖ Alcohol ❖ Methyl alcohol ❖ Isopropyl alcohol ❖ Ethylene glycol 	LGIS 01 hour	MCQs SEQs SAQs VIVA OSPE
17.	Sedatives & Hypnotics <ul style="list-style-type: none"> ➤ Describe the clinical features, diagnosis, treatment, postmortem appearance and medico legal significance of sedatives and hypnotics. 	Medico legal aspects of <ul style="list-style-type: none"> ❖ Benzodiazepine ❖ Barbiturates 		MCQs SEQs SAQs VIVA OSPE
18.	Forensic Pharmacology <ul style="list-style-type: none"> ➤ Describe the clinical features, diagnosis, treatment, postmortem appearance and medico legal significance of: ➤ Drugs in common therapeutic use ➤ Drugs of no medicinal use ➤ Street drugs 	<ul style="list-style-type: none"> ❖ Medico legal aspects of salicylates & paracetamol. ❖ Tranquillizers ❖ Antidepressant ❖ LSD ❖ Phencyclidine 	SGD 02 hour	MCQs SEQs SAQs VIVA OSPE

19.	<ul style="list-style-type: none"> ➤ Ethics of therapeutic abortion & Artificial insemination. ➤ Ethical issues in organ transplant & organ Transplant Act. 	❖ Organ transplant & organ Transplant Act.	SGD 01 hour	MCQs SEQs SAQs VIVA OSPE
20.	<p>Head Injuries</p> <ul style="list-style-type: none"> ➤ Discuss medico legal aspects of head injuries. 	❖ Medico legal aspects of head injuries.	LCF 01 HOUR	MCQs SEQs SAQs VIVA OSPE

LEARNING RESOURCES / RECOMMENDED BOOKS:

Pharmacology:

- I. Basic & Clinical pharmacology by Katz Ung, 13th Edition.
- II. Rang and Dale pharmacology 8th Edition.
- III. Basic of pharmacology by Goodman & Gillman Latest Edition.
- IV. Bentley' s Textbook of pharmaceutics by Jain 2012 An adaption
- V. Medical pharmacology & Therapeutics by Walker's 3rd Edition.
- VI. Netters IIIustrated pharmacology by RAFFA Latest Edition.

Pathology:

- I. Robbins and Cortan Pathologic Basic of Disease
 - II. Basic pathology by Kumar
 - III. Concise pathology
- Review of medical microbiology and immunology by Warren Levenson and Ernest Jawetz, Fourteenth Edition.

Forensic Medicine:

- I. Parikh's Textbook of Medical jurisprudence Forensic medicine and Toxicology 7th Edition
- II. Simpsons Forensic medicine 13th Edition
- III. Principles of Forensic medicine by Naseeb. R. Awan.
- IV. Book of forensic medicine and Toxicology Principles and Practice by Krishan VJ
- V. Review of Forensic Medicine and Toxicology 3rd Edition by Biswas
- VI. Pakistan Penal Code

Medicine:

- I. McLeod's Clinical Examination
- II. Davidsons Principles and Practice of Medicine

Pediatrics:

- I. Textbook of Pediatrics (Pervaiz Akbar) 7th Edition
- II. Nelson Textbook of Pediatrics

Surgery:

- I. Bailey and Love Short Practice of Surgery, CRC Press 26th Edition
- II. Current Surgical Diagnosis and Treatment
- III. Surgery; Principles in General by Shuja Tahir & Adid Bashir.
- IV. Hamilton Bailey Demonstration of Physical Signs in Clinical Surgery.
- V. Browse Introduction to signs and symptoms of surgical diseases
- VI. Clinical skills for undergraduates by Abdul Majeed Ch. And Amer Zaman Khan.

TRAINING PROGRAM 3rd YEAR MBBS
(BLOCK VII) MODULE I (FOUNDATION I) 1ST WEEK
(THEME: PRIMARY APPROACH)

Time/ Days	0800 – 0850	0900 – 0950	1000-1050	1050 -1110	1110-1200	1300-1350	1350- 1410	1410 - 1500
Monday		Pathology SGD	Medicine & Allied	T E A B R E A K	ENT	Clinical Training	L U N C H & P R A Y E R B R E A K	Clinical Training
	Test	Gastritis H. Pylori	Classification of Psychiatric disorders			As per clinical rotation		Pharmacology
Tuesday	Surgery &Allied	Pediatrics	Pathology SGD		Pathology SGD	Clinical training		Clinical training
	Acute abdominal pain	Dysentery	Oral cavity inflammato ry lesions		Oral cavity inflammatory lesions	As per clinical rotation		
Wednesday	Pathology	Pharmacology	Pathology DSL		Pharmacology	F.M		Practical/ SGD
	Oral cavity Tumors of oral cavity	Treatment of acid peptic disease-I			Treatment of acid peptic disease-II	Irritants vegetable poisons		Pathology Pharmacology Forensic Medicine
Thursday	Pathology	Pharmacology	Pathology		Pharmacology DSL	Pathology		Practical
	Oral cavity salivary gland tumors Tumors of oral cavity	Treatment of inflammatory bowel disease Classification of drugs	Organisms causing infectious Diarrhea/ Dysentery		Esophagus Reflux disease Inflammatory lesions	F.M Pathology Pharmacology		
Friday	Pathology	Pharmacology	F.M	Pharmacology SGD	Pathology	Practical (1300-1500)		
	Intestine Inflammator y lesions	Treatment of inflammatory Bowel disease Therapeutic uses of drugs	Infanticide	Pharmacology of emetics and antiemetic drugs		Pharmacology Forensic Medicine Pathology		
Saturday	HOLIDAY							
Sunday	HOLIDAY							

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