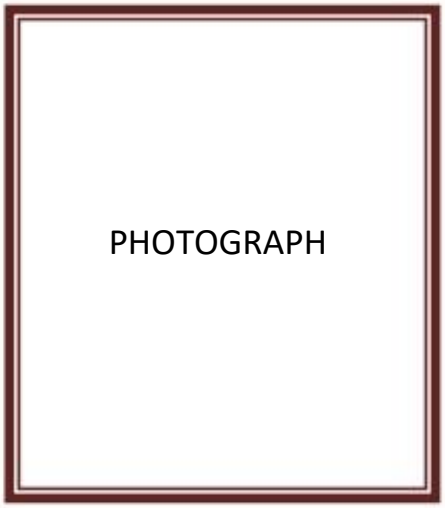
Rawal Institute of health Sciences, Islamabad

Study Guide & Clerkship Manual

Medicine, Surgery, Gyn/Obs, Paediatrics

5th Year MBBS



Name: _____

College ID NO: _____

Class: _____

Batch: _____

STUDENT STUDY GUIDE

FINAL YEAR MBBS

MEDICINE, SURGERY, GYN/OBS & PAEDIATRICS

RAWAL INSTITUTE OF HEALTH SCIENCES

ISLAMABAD

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Principal Rawal Medical College

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PREFACE

The best way to teach medicine, is to teach on the patients. The idea of introducing clinical clerkship program in 4rth and 5th year MBBS is to expose the students to the patients as much as possible so they can have the real feel of signs and symptoms of different diseases, develop communication skills with the patients, apply their knowledge and be able to learn to manage different diseases. This will in turn make them better doctors and ultimately leading to better patient care. This guide book provides an outline of the whole clerkship program of the current year and will guide the students to build their clinical skills based on sound knowledge more objectively. Students are encouraged to study the subjects extensively utilizing different resources mentioned in these guidelines. Only a sound knowledge will help them become good clinicians as it is said, "The eyes don't see, what the mind doesn't know"

I am extremely thankful to Prof Azam Zia, Principal Rawal Medical & Dental College, Mr. Khaqan Waheed Khwaja, Chairman RIHS and Ms SalehaKhaqan, Chairperson RIHS, for their guidance and support.

Prof. M Shakaib Anwar

Chief Instructor, Clinical Clerkship

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MEDICINE

Introduction

The students are posted in medicine for 8 weeks with prescheduled curriculum based on SGDs, PBLs, OSCEs, Short and Long cases, SDL and assignments. Students have full time access to wards, ICU, CCU and ER under supervision of faculty and staff. In addition, post graduate trainees are also available 24 hours for patient care and student guidance.

The Medicine and Allied departments have an average daily OPD of 200, IPD of 70 with bed occupancy >60%. Following procedures are routinely performed: NG, foleys insertion, CVP line, dialysis catheter, lumbar puncture, ascitic tap, pleural fluid aspiration, endotracheal intubation, ABGs,CPR,endoscopy,ETT,Echocardiography.

Facultry and Teaching Staff:

1. HOD, Prof. Dr. Nadia Shams
2. Associate Professor Dr Hussain Baloch
4. Assistant Professor Dr Nadeem Yousaf
5. Assistant Professor Dr Anwar Hussain Abbasi
6. Assistant Professor Dr Mehwish Aftab
7. Senior Registrar Dr Hina Andaleeb
8. Senior Registrar Dr Zaid Umer

Curriculum Medicine

Content/ Topic	Learning objectives	Teaching & learning strategy	Assessment Methodology
GIT & LIVER			
GIT symptoms evaluation	Describe Common GIT symptoms i.e. • Epigastric pain • Diarrhoea, dysentery • Hematemesis, melena, bleeding per rectum • Dysphagia • Weight loss • Constipation • Ascites • Jaundice	LGIS 2hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)
Various motility disorders	Describe Motility disorders • Define motility disorders • Classify its type • Discuss the clinical features. • List the investigations related to motility disorders Outline the Management	LGIS 2hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un obs)
Peptic ulcer disease	Describe Peptic ulcer disease • Define and describe its clinical features • list the investigations. Describe the management plan and complications	LGIS 2hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un obs)
describe Inflammatory bowel disease	• Define inflammatory boweldisease. • Discuss clinical features and complications • List the relevant investigations Describe the management plan	LGIS 2hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)

Acute and chronic diarrhea	Acute and chronic diarrhea Define acute and chronic diarrhea Discuss clinical features and complications List investigations Discuss management plan	LGIS 2hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Assignments Ward tests, OSPE (obs&un obs)
Malabsorption syndromes	Define various malabsorption syndromes Common signs and symptoms enlist the investigations Outline management	LGIS 2hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Assignments Ward tests, OSPE (obs&un obs)
GI Neoplasms	GI Neoplasms Classify Tumors of upper and lower GI tract Classify Tumors of liver Enlist Investigations Outline Management	LGIS 2hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/CBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un obs)
Types of Hepatitis	Acute and chronic hepatitis Enlist Types Common signs and symptoms Diagnostic workup Outline Management	LGIS 2hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/CBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)
Chronic liver disease and its complications	Chronic liver disease and its complications Define CLD Describe signs and symptoms describe Investigations Describe complications of cirrhosis i.e. ascites, hepatic encephalopathy, upper GI bleed	LGIS 2hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/CBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)
Wilson's disease, hemochromatosis, various	Wilson's disease, hemochromatosis, various metabolic disorders Define		MCQS SEQS,SAQS

metabolic disorders	describe the Signs and symptoms enumerate investigations outline management	LGIS 2hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	Class tests Assignments Ward tests, OSPE (obs&un obs)
Acute and chronic pancreatitis	Acute and chronic pancreatitis Define describe the Signs and symptoms enumerate the Investigations outline management	LGIS 2hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Assignments Ward tests, OSPE (obs&un obs)
Investigations in GIT and LIVER diseases	Investigations in GIT and LIVER diseases enumerate lab investigations describe the radiology describe the endoscopic procedures, ERCP, EUS describe ascitic fluid analysis	LGIS 2hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Assignments Ward tests, OSPE(obs& unobs)

CARDIOVASCULAR			
Angina/ NSTEMI	NSTEMI Describe the clinical symptoms Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
STEMI	STEMI Describe the clinical symptoms Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation(1hr)SGD/SDL/PBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Hypertension	HTN Describe the stages of hypertension Differentiate between primary and secondary HTN Investigate a case of HTN Outline management plan Correctly record blood pressure via sphygmo-manometer	LGIS (1 hr) Clinical Ward rotation(1hr)SGD/SDL/PBL/ skills lab	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
CCF	CCF Describe the clinical symptoms Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation (1hr)SGD/SDL/PBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Cong. heart defects/ VSD/ ASD. Fallots tetrology	Cong heart defects Describe the clinical symptoms Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward / emergency rotation SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

Pericarditis/ pericardial effusion	Pericarditis/ pericardial effusionDescribe the clinical symptoms Describe the laboratory investigations Outline the management plan Pericardiocentesis describe the procedure, indications and interpretation of pericardial fluid report	LGIS 30 min Clinical Ward rotation lab(1hr) SGD/SDL/CBL Skills lab 30 min	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Valvular heart diseases	Valvular heart diseases Describe the clinical symptoms Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Infective endocarditis	Infective endocarditis describe the procedure Interpret the report of ABGs	LGIS 1hr Clinical Ward rotation/Skills lab(30 min) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Rheumatic fever	Rheumatic fever Describe the clinical symptoms Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rot/Skills lab(30 min)	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Rhythm disorders/ atrial fibrillation	Arrythmias identify the rhythm abnormality on ECG Enumerate its causes Outline the management identify the rhythm on cardiac monitor simulation	LGIS 1.5 hrs Clinical Ward rotation/Skills lab(30 min)	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ
ECG & ETT	ECG & ETT Should be able to correctly apply ECG leads and perform ECG Should be able to describe ETT procedure, indications and interpretation.	SGD, cardiology rotation, Skills lab, 1 hr.	Ward tests, OSPE (obs &un observ

Echocardiography	Echocardiography Should be able to describe echocardiography procedure, indications and interpretation.	SGD, cardiology rotation, Skills lab, 1 hr	Ward tests, OSPE (obs &un observ
CPR	CPR enumerate indications of CPR Indications and procedure as per AHA guidelines	SGD, cardiology rotation, Skills lab, 1 hr BLS course as per AHA gudelines 3 hrs	Ward tests, OSPE (obs &un observ) End of worshop assessment of BLS via BCQs, and Viva/ OSPE.
Interventional cardiology	Interventional cardiology describe the procedure and indications of angio-graphy, PCI, CABG	SGD, visit to cath lab, cardiology rotation (1 hr)	Ward tests, OSPE (obs &un observ
RESPIRATORY			
Pulmonary tuberculosis	Pulmonary tuberculosis Describe the clinical symptoms Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Pneumonias	Pneumonias Describe the clinical symptoms Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation(1hr)SGD/SDL/PBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
COPD	COPD Describe the clinical symptoms Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation (1hr)SGD/SDL/PBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Lung fibrosis/ ILD	Lung fibrosis/ ILD Describe the clinical symptoms Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward / emergency rotation SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un obs)

Pleural effusion	Pleural effusion - Describe the clinical symptoms - Describe the laboratory investigations - Outline the management plan Pleural fluid aspiration describe the procedure, indications and interpretation of pleural fluid report	LGIS 30 min Clinical Ward rotation lab(1hr) SGD/SDL/CBL Skills lab 30 min	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Pneumothorax	- Describe the clinical symptoms - Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Arterial blood gases	Arterial blood gases - describe the procedure - Interpret the report of ABGs	LGIS 1hr Clinical Ward rotation/Skills lab(30 min) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Asthma	Asthma - Describe the clinical symptoms - Describe the laboratory investigations Outline the management plan Describe the procedure and indications of nebulization.	LGIS 1.5 hr Clinical Ward rotation/Skills lab(30 min)	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
CA lung	CA lung - Describe the clinical symptoms and risk factors - Describe the laboratory investigations - Outline the management plan bronchoscopy Describe the procedure and indications of bronchoscopy	LGIs 1 hr Skills lab, pulmonology rotation, SGD	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

Bronchiectasis	Bronchiectasis - Describe the clinical symptoms and risk factors - Describe the laboratory investigations - Outline the management plan	LGIs 1 hr Skills lab, pulmonology rotation, SGD	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Pulmonary function tests	PFTs describe the indicationsprocedure &interpretation.	Skills lab, pulmonology rotation, SGD(30 min)	Ward tests, OSPE (obs &un observ)
Occupational lung diseases	Occupational lung diseases - Should be able to describe causative factors, signs and symptoms of OLDs Should be able to investigate, manage and prevents OLDs.	LGIs 1 hr Skills lab, pulmonology rotation, SGD	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Sarcoidosis	Sarcoidosis Describe the clinical symptoms and risk factors - Describe the laboratory investigations Outline the management plan	LGIs 1 hr Skills lab, pulmonology rotation, SGD	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
DERMATOLOGY			

Papulo-squmaous skin disease	PSORIASIS Define psoriasis Describe characteristics of lesions and etiology Describe aggravating factors Enumerate sites involved Outline general management and treatment options	LGIS 2hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests, assignments Ward tests, OSPE (obs &un observ)
Papulosquamous disease LICHEN PLANUS	Lichen planus Define lichen planus and characteristic rash Describe etiology, pathology, clinical features, associations and diagnosis Enlist treatment options	LGIS 1hr Clinical Ward rotation(1hr)SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Eczema	Eczema Define eczema Differentiate between dermatitis and eczema Classify eczema as acute and chronic and its types Describe morphological patterns, enumerate investigations Outline general management and specific treatment according to type of eczema.	LGIS 2hr Clinical Ward rotation (1hr)SGD/SDL/PBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Immunobullous disesaes Pemphigus vulgaris Bullous pemphigoid	Define immunobullous disease Define pemphigus vulgaris, bullous pemphigoid, pemhigus foliaceus Discuss differntating points between different imm.bull. conditions Describe clinical features Enlist investigations (skin biopsy) to diagnose Outline general management and specific treatment options	LGIS 2hr Clinical Ward / SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

Cutaneous infections:	Cutaneous infections Bacterial infections - Define folliculitis,frucncle,carbuncle,Ecthyma, impetigo,erysipelas, cellulitis - Describe etiology,causative pathogen, clinical features - Enlist investigations to confirm diagnosis Enlist specific antibiotics according to pathogen	LGIS 2hr Clinical Ward rotation lab(1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Syphilis	Syphilis - Sexually transmitted disease Describe common symptoms, investigation and management of syphilis - Describe clinical features of primary, secondary and tertiary Syphilis	LGIS 1hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Tuberculosis	Tuberculosis - Different morphological forms of cutanoeus tuberculosis - Describe the diagnosis, investigation and management of extrapulm. TB Describe the management of TB, the schedule and side effects of anti-TB drugs	LGIS 1hr Clinical Ward rotation) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Cutaneous infections	Fungal and viral infections - Classify fungal infections - Describe characteristic clinical features of different types - Enlist causative agents(dernatophytes) - Outline treatment of fungal infections - Classify of viral infections, moluuscum contagiosum,viral warts,herpes simplex virus, - Describe clinical features and diagnosis Outline general management of viral infections.	LGIS 2hr Clinical Ward rotation/ SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ

Cutaneous Infestations Scabies pediculosis	Cutaneous infestations Define scabies, - Describe characteristic clinical symptoms and signs - Enumerate investigations to confirm diagnosis - Outline general management and specific treatment - Describe treatment of contacts - Describe pediculosis sites predilection Outline treatment	LGIS 1hr Clinical Ward rotation/ SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ
Cutaneous malignancies - Squamous cellCA - Basal cell CA - Malignant melanoma	Skin tumours - Classify skin tumours as beign and malignant and pre-malignant skin tumors - Clinical features of squamous cell ca - Basal cell ca - Malignant melanoma - General management approach toward skin tumors	LGIS 1hr Clinical Ward rotation/ SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ
	PSYCHIATRY		
GAD	Generalized Anxiety Disorders - Define anxiety disorders - Discuss the types of Anxiety Disorders. - Discuss the causes of anxiety Disorders - Enlist the Comorbidity - Develop an outline of management plan for Anxiety Disorders	LGIS 2hr Clinical Ward rotation	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs &un observ)
Depression	Depression - Define core symptoms of Depression - Classify Depression according to ICD-11 - Discuss the Diagnostic Critera - List the investigations related to Depression Outline the Psychological and pharmacological management plan for Depression	LGIS 2hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs &un observ)

Schizophrenia	Schizophrenia • Define Schizophrenia Explain Positive and Negative Symptoms of Schizophrenia. • Define the Diagnostic Criteria according to ICD. • Enlist the pharmacological and Psychological assessment for Schizophrenia. Describe the management plan and complications.	LGIS 2hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs &un observ)
Organic disorders Dementia Delirium	Organic disorders • Dementia • Delirium • Define organic brain disorders. Define and compare types of organic disorders. • Discuss causes. • enlist the relevant investigations Describe the management plan	LGIS 2hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs &un observ)
Personality Disorders	Personality Disorders • Define Personality disorders according to 3 Clusters. • Discuss the etiology of personality Disorders • Enlist psychological assessment of Personality Disorders. Develop a management plan	LGIS 2hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs &un obs)
EEG	EEG To describe the indications and procedure for EEG	SGD, skills lab, ward rotation 30 min	Ward tests, OSPE (obs &un observ)
ECT	ECT To describe the indications and procedure for	SGD, skills lab, ward rotation 30 min	Ward tests, OSPE (obs &un observ)

ENDOCRINOLOGY			
Hyperthyroidism Parathyroid disorders Clinical Examination of thyroid Gland	THYROID AND PARATHYROID DISORDERS - Identify the signs and symptoms of thyroid & parathyroid disorders - Describe various causes of thyroid & parathyroid disorders - List the relevant investigations of thyroid & parathyroid disorders - Justify the management plan of thyroid & parathyroid disorders Describe the complications of thyroid & parathyroid disordersHypothyroidism	LGIS 2 hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/PBL	MCQS SEQS SAQS , Class tests Assignments Ward tests OSPE (obs &un observ)
Diabetes classification and symptomatology Micro and macro vascular compl. of diabetes. Management of diabetes and diabetic emergencies Take and present detailed history and examination of diabetic patient. Perform glucocheck via glucometer	DIABETES MELLITUS - Define Diabetes Mellitus - Classify Diabetes Mellitus as type 1 and 2 - Identify the signs and symptoms of Diabetes Mellitus - Interpret investigationsrelated to the Diabetes Mellitus - Discuss the management & complications of DM - identify and describe the management of diabetic emergencies, hypo and hyperglycemia	LGIS 3 hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests, OSPE (obs &un observ)
Introduction to pituitary disorders, hypothalamic pituitary axis and classification of pituitary disorders	PITUITARY DISORDERS - Should be able to describe the functions of pituitary gland - the hypothalamic pituitary axis - the symptoms, diagnosis and management of	 LGIS 2hr	MCQS SEQS SAQS

ushing's syndrome	hypopituitarism • Growth hormone disorders- Gigantism and acromegaly CUSHING SYNDROME • Define Cushing Syndrome, Discuss its types • Identify the signs and symptoms of Cushing Syndrome • Interpret investigations related to the Cushing Syndrome • Discuss the management plan of Cushing Syndrome • Describe the complications of Cushing Syndrome	Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	Class tests Assignments Ward tests, OSPE (obs &un observ)
Adrenal disorders Examination for postural Drop of BP, pigmentation ,etc	ADRENAL DISORDERS • Should be able to identify symptoms of Addisons disease, the investigations and management • Should be able to identify symptoms of CONNS ADENOMA, the investigations and management Should be able to elicit clinical signs of addisons	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests, OSPE (obs &un observ)
Nephrology			
Clinical anatomy of Renal Tract.	● Discuss Nephron (Glomerulus, PCT, DCT, Loop of Henle & Collecting ducts.	LGlS 1 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Ward tests, Assignments OSPE(obs & un observ)
Clinical Physiology of Renal Tract.	● Discuss various functions Fluid volume & its Composition, Serum Electrolytes, Excretion of waste products, Regulation of B. P., Erythropoietin, & 1 alpha Hydroxylation of vit. D	LGlS 1 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Ward tests, Assignments OSPE(obs & un observ)

Assessment of Renal Functions	How to Assess:- ● Glomerular Filtration Rate ● S/E (Na & K) ● RFTs (Urea & Creatinine) ● Renal Tract Ultrasound ● DTP Scan	LGlS 1 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Ward tests, Assignments OSPE(obs & un observ)
Urine abnormalities of quantity quality & others.	Discuss the normal urine & abnormal findings as protein urea, hematuria casts, crystals & abnormal colors etc.	LGlS 1 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS, SAQS Class tests Ward tests, Assignments OSPE (obs & un observ)
Acute Kidney	● Define KI ● Types of KI based on Pathophysiology (Pre- Renal, Intrinsic Renal & Post Renal) & various Etiologies. ● Prevention & Management Injury.	LGlS 2 hrs Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS, SAQS Class tests Ward tests, Assignments OSPE (obs& un observ)
Chronic Kidney Disease	● Define CKD & its Stages ● Discuss various Etiologies ● Recognize Complications ● General management ● Renal Replacement Therapy Indications	LGlS 2 hrs Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS, SAQS Class tests Ward tests, Assignments OSPE (obs & un observ)

Interstitial Disease	● Discuss various Etiologies(NS IDs, Heroin, ids) ● Clinical Features ● Management	LGlS 2 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS, SAQS Class tests Ward tests, Assignments OSPE (obs & un observ)
Primary & Secondary Glomerular diseases	● Discuss various types of Glomerulonephridities ●Clinical features in each category	LGlS 2 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS, SAQS Class tests Ward tests, Assignments OSPE (obs & un observ)
Proteinuria	● Etiologies of Proteinuria ● Physiological proteinuria ● Differential Diagnosis of Proteinuria ● Management of Proteinuria	LGlS 2 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS, SAQS Class tests Ward tests, Assignments OSPE(obs & un observ)
Nephrotic Syndrome	●Discuss etiology of Nephrotic Syndrome ● Recognize Metabolic complications due to disease & steroids. ● Diagnostic procedures ● Management	LGlS 2 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS, SAQS Class tests Ward tests, Assignments OSPE(obs & un observ)

Systemic Diseases & Kidney	● Discuss Renal afflictions in other systemic diseases as:- ► Hypertension. ►Diabetes. ►SLE & other CTDS. ►Cardio-Renal & Pulmo-Renal Syndromes.	LGlS 2 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Ward tests, Assignments OSPE(obs & un observ)
Urinary Tract Infections.	● Discuss UTIs ,Uncompl.& complicated. ●Pyonephrosis	LGlS 2 hrs Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Ward tests, Assignments OSPE(obs & un observ)
Acid Base Disorders.	●Student should identify the disorder, interpret ABGs &outline the management of the patient.	LGlS 2 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Ward tests, Assignments OSPE(obs & un observ)
RRTs	●Discuss various modalities of RRTs, procedures, merits & costs to enable the Patient chose a modality that suits him best.	LGlS 2 hrs Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Ward tests, Assignments OSPE(obs & un observ)

Renal Transplant.	●Discuss the donation options (suitable donor selection) ●Post- transplant complications. ●Immunosuppression	LGIS 2 hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS SEQS,SAQS Class tests Ward tests, Assignments OSPE(obs & un observ)
INFECTIOUS DISEASES			
Approach to fever and PUO temperature monitoring and charting	Pyrexia of Unknown Origin (PUO) Define Pyrexia of Unknown Origin Discuss the criteria of PUO List the investigations related to PUO Develop an outline of management plan for PUO	LGIS 1hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Malaria	Malaria Define Malaria Classify its type Discuss the clinical features & complications of Malaria List the investigations related to malaria Outline the management plan for malaria	LGIS 1hr Clinical Ward rotation(1hr)SGD/SDL/ PBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Enteric fever	Enteric fever Define enteric fever and describe its clinical features list the investigations for enteric fever Describe the management plan and complications	LGIS 1hr Clinical Ward rotation (1hr)SGD/SDL/PBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

Viral hemorrhagic fevers/Dengue fever	VIRAL HEMORRHAGIC FEVERS/DENGUE FEVER - Define dengue, Lasa and Congo fever - Discuss clinical features and complications of Dengue fever - List the relevant investigations - Describe the management plan and prevention for dengue fever.	LGIS 1hr Clinical Ward / emergency rotation SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
HIV / AIDS Post Exposure prophylaxis (PEP	HIV - Define HIV - Discuss clinical features and complications - List investigations for HIV - Develop a management plan for HIV - Describe the management plan for needle prick injuries	LGIS 1hr Clinical Ward rotation lab(1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Syphilis	Syphilis - Describe common symptoms, investigation and management of syphilis - Describe clinical features of primary, secondary and tertiary syphylis	LGIS 1hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

Tuberculosis I Tuberculosis II Sputum for AFB Pleural aspiration	Tuberculosis - Describe the diagnosis, investigation and management of Pulmonary/ extrapulm. TB - Describe the management of TB, the schedule and side effects of anti-TB drugs - describe method to collect sputum for AFB - Describe the procedure for Pleural effusion aspiration	LGIS 2hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

ENVIRONMENTAL DISEASES			
Thermal Injuries	Thermal Injuries - Describe the symptoms and signs of heat stroke and management - Describe the diagnosis and management of frost bite	LGIS 1hr SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
High Altitiude Sickness/ Caissons disease	High Altitute sickness - Describe the symptoms of high altitude sickness and management Caissons disease - Describe symptoms and management of Caissons disease	LGIS 1hr SGD/SDL/CBL 30 min	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

Acute Poisoning NG lavage, steps and indications	Acute Poisoning - enumerate the common causes of acute poisoning - describe the emergency management of a case with suspected poisoning - Describe the antidotes of common poisoning - Describe the steps of nasogastric lavage	LGIS 1hr emergency, clinical Ward rotation Skills lab 1hr	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
- Carbon monoxide poisoning - Organophosphate poisoning - Benzodiazepine poisoning - Corrosive ingestion	Acute poisoning - Describe clinical features and management /antidote of CO poisoning - Describe clinical features and management / antidote of Organophosphate poisoning - Describe clinical features and management / antidote of Benzodiazepine poisoning - Describe clinical features and management / antidote of corrosive ingestion	LGIS 2hr emergency, clinical Ward rotation Skills lab 1hr	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Snake bite	Snake bite - Describe the diagnosis, investigations and emergency management of snake bite - Describe the method of administration of anti-snake venom	LGIS 1hr Emergency &Clinical Ward rotation(1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Rabies	Rabies - Describe the diagnosis, investigations and emergency management of dog bite - Describe administration od HDCV	LGIS 1hr Emergency &Clinical Ward rotation(1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

Lead poisoning	Lead poisoning Describe clinical features, management of lead poisoning	LGIS 1hr Emergency &Clinical Ward rotation(1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
Obesity	Obesity Define obesity and classify according to BMI Describe the causes and effects of obesity	LGIS 1hr Emergency &Clinical Ward rotation(1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

NEUROLOGY			
Approach to CNS infections (Meningitis, Encephalitis, Brain abscess, Cerebral Epilepsy etc.) Lumbar puncture	Infections of Brain ɔ Define types of infections. ɔ Discuss the causes and symptoms of CNS infections. ɔList the investigations. ɔ Outline management plan. Lumbar puncture Describe the technique of lumbar puncture Can interpret CSF RE report.	LGIS 2 hr Clinical Ward rotation/Skills lab(1hr)SGD /SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests OSPE (obs &un observ)
Epilepsy	Epilepsy and other convulsive disorders. Define Epilepsy and classify Discuss the clinical features & complications of Epilepsy List the investigations related to Epilepsy Outline the management of epilepsy EEG Can describe technique andinterpretation	LGIS 2 hr Clinical Ward rotation/Skills lab(1hr)SGD /SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests OSPE (obs &un observ)
Cerebrovascular disease (TIA, Stroke, SAH, Cerebral hemorrhage, subdural hemorrhage)	Define Cerebrovascular disease describe its clinical features enlist the investigations for Cerebrovascular disease Describe the managementplan and complications	LGIS 2 hr Clinical Ward rotation/Skills lab(1hr)SGD /SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests OSPE (obs &un observ)

Alzheimer's disease & dementia	lzheimer's diseaseand dementia define alzheimer's disease & dementia discuss clinical features and complications list the relevant investigations describe the management plan and prevention of the above	LGIS 1hr Clinical Ward rotation/ Skills lab(1hr) SGD/SDL/ PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests, OSPE (obs &un observ)
Parkinson's disease and other movement disorders	Parkinson's disease and movement disorders define parkinson's disease and other movement disorders discuss clinical features and complications list investigations for parkinson's disease and other movement disorders develop a management plan for parkinson's disease and other movement disorders	LGIS 2 hr Clinical Ward rotation/Skills lab(1hr)SGD /SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests OSPE (obs &un observ)
Motor Neuron disease Multiple Sclerosis Myasthenia Gravis	Motor Neuron disease Multiple Sclerosis Myasthenia Gravis Define Discuss the causes and symptoms Enlist the investigations Develop an outline of the management plan. EMG.NCS Can describe procedure of Can interpret basic report	LGIS 3 hr Clinical Ward rotation/Skills lab(1hr)SGD /SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests OSPE (obs &un observ)
Cranial Nerve disorders Spinal cord disorders Peripheral nerve disorder.	Define and introduction of nerve pathways. Discuss the Cause and symptoms List the investigations and develop an outline of the management plan.	LGIS 2 hr Clinical Ward rotation/Skills lab(1hr)SGD /SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests OSPE (obs &un observ)

Headache Migraine Trigeminal Neuralgia Hydrocephalus and raised intra cranial pressure	Headaches - Define various types - Outline investigation and management	LGIS 1 hr Clinical Ward rotation 1hr)SGD /SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests OSPE (obs &un observ)
Coma	Coma: - Enumerate various causes of coma. - Outline investigation and management. GCS - can define GCS can describe how to calculate GCS	 Clinical Ward rotation(1hr)SGD /SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests OSPE (obs &un observ)
RHEUMATOLOGY			
SLE	 SLE - Describe the clinical symptoms - Describe the laboratory investigations Outline the management plan	 LGIS 1hr Clinical Ward rotation/Skills lab(1hr)SGD/SDL/CBL	 MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
RA	Rheumatoid arthritis - Describe the clinical symptoms - Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation(1hr)SGD/SDL/PBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

Osteoarthritis	Osteoarthritis - Describe the clinical symptoms - Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation (1hr)SGD/SDL/PBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
GOUT	Gout - Describe the clinical symptoms - Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward / emergency rotation SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
SYSTEMIC SCLEROSIS	Systemic sclerosis - Describe the clinical symptoms - Describe the laboratory investigations Outline the management plan	LGIS 2hr Clinical Ward rotation lab(1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
OSTEOPOROSIS/ Calcium and vitamin D deficiencies	Osteoporosis/ calcium and vitamin D deficiencies - Describe the clinical symptoms - Describe the laboratory investigations - Outline the management plan	LGIS 1hr Clinical Ward rotation (1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)
ANKYLOSING SPONDYLITIS -	Ankylosing spondylitis - Describe the clinical symptoms - Describe the laboratory investigations Outline the management plan	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/CBL	MCQS,SEQS SAQS, Class tests,Assignments Ward tests, OSPE (obs &un observ)

HAEMATOLOGY/BLOOD DISORDER			
IRON DEFICIENCY ANEMIA:	IDA describe the Pathophysiology and Causes describe Clinical Features and Differential Diagnosis Outline the prevention and Management of IDS	LGIS 2hr Clinical Ward rotation/Skills lab(1hr)SGD/ SDL /PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)
Vitamin -B12 and folic Acid Deficiency	MEGALOBLASTIC ANEMIA: describe the Pathophysiology and Causes describe Clinical Features and Differential Diagnosis Outline the prevention and Management	LGIS 1hr Clinical Ward rotation/Skills lab(1hr)SGD/ SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)
APLASTIC ANEMIA:	Aplastic Anemia describe the Pathophysiology and Causes describe Clinical Features and Differential Diagnosis Outline the prevention and Management	LGIS 1hr Clinical Ward rotation/Skills lab(1hr)SGD/ SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)
HEMOLYTIC ANEMIA:	Hemolytic Anemia describe the Pathophysiology and Causes describe Clinical Features and Differential Diagnosis Outline the prevention and Management Describe the Screening for thalassemias and Sickle cell anemia describe the diagnosis and management of G6PD Deficiency describe causes and management of Autoimmune HA describe causes and management of paroxysmal noctornal hemo-globinuria	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)

Myeloproliferative Disorders	MYELOFIBROSIS ANEMIA: - Describe General Considerations - Describe the Clinical Features - Write down the Laboratory Diagnosis - Outline the Management	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/ SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)
IDIOPATHIC THROMBOCYTHPENIC PURPURA:	Purpura - describe the Pathophysiology and Causes - describe Clinical Features and Differential Diagnosis - Outline theManagement	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS,SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)
DISSEMINATED INTRAVASCULAR COAGULATION:	DIC - General Consideration - describe the Pathophysiology and Causes - describe Clinical Features and Differential Diagnosis Outline the prevention and Management	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)

Paraproteinemias	MULTIPLE MYELOMA: describe the Pathophysiology and Causes describe Clinical Features and Differential Diagnosis Outline the prevention and Management	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un obs)
LYMPHOMA:	Lymphomas Define the Types 1-Non-Hodgkin 2-Hodgkin Lymphoma Describe the Classification, Etiology, Clinical Features Write the Laboratory Diagnosis Outline the Management Describe the Prognosis	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)
LEUKEMIA:	Leukemia Describe the Types 1-AML 2-CML 3-CLL Classfy and describe Staging Describe the Pathogenesis and Clinical Features describe Laboratory Findings Outline the Treatment Describe the Prognosis	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)
APPROACH TO HEPATOMEGALY,SPLENOMEGALY AND LYMPHADENOPATHY:	Hepatosplenomegaly Enumerate the Causes Develop a plan for Diagnostic Approach describe the Differential Diagnosis	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un obs)

BLOOD TRANSFUSION:	Blood Transfusion describe the Types describe the Indications describe the features of Transfusion Reactions outline the Management of transfusion reaction	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un obs)
PORPHYRIAS	Porphyrias Desribe the Types, Etiology, Clinical Features, Diagnosis Outline the Treatment and screening	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs& un observ)
BONE MARROW TRANSPLANT AND BIOPSY:	Bone Marrow describe the Indications and Contraindications describe the Procedure describe the Complications and GVHD	LGIS 1hr Clinical Ward rotation/Skills lab(1hr) SGD/SDL/PBL	MCQS SEQS SAQS Class tests Assignments Ward tests, OSPE (obs&un observ)

Dept. of Medicine RIHS - 5th YEAR MBBS

8 am-3 pm	THEME	TOPIC	PRESENTER
WEEK 1			
MONDAY 8-1:00 pm	ENDOCRINOLOGY & DIABETES	DIABETES MELLITUS, Types, complications (macrovascular and microvascular)	PROFESSOR WAQAR
1-3:00 pm	CLINICAL METHODS	HISTORY TAKING	SR/PGT
TUESDAY 8-12:00 pm 12-3:00 pm	RHEUMATOLOGY OPD	Joint examination, classification of arthritis, small joint versus large joint arthritis, metabolic bone disease, calcium and vit D deficiency	DR NADEEM
WEDNESDAY 8-2:00 pm	INFECTIOUS DISEASES/ ENV DIS/ POISONING	Introduction, classification of antibiotics, bacterial, viral and fungal inf.	DR NADIA
2-3:00pm	HAEMATOLOGY	Anaemias, IDA	DR HINA
THURSDAY 8-1:00 pm 1-3 pm	NEUROLOGY	CNS infections, meningitis	DR ASHFAQ
	PSYCHIATRY	Introduction to psychiatric history and assessment, common psychiatric medicines	HOD PSYCHIATRY
FRIDAY 8-1/2-3:00 pm	NEPHROLOGY SDL	CRF	DR H BALOCH
WEEK 2			
MONDAY 8-1:00 pm 1-3:00 pm	ENDOCRINOLOGY & DIABETES	Diabetes Mellitus management	PROFESSOR WAQAR
	CLINICAL METHODS	GIT	SR/PGT
TUESDAY 8-12:00 pm 12-3:00 pm	RHEUMATOLOGY OPD	Rheumatoid arthritis	DR NADEEM
WEDNESDAY 8-2:00 pm	INF DISEASES/ ENV DIS/ POISONING	Typhoid fever	DR NADIA
2-3:00pm	HAEMATOLOGY	B12, folatedef, haemolyticanaemia	DR HINA
THURSDAY 8-1 pm 1-3 pm	NEUROLOGY	CVA, haemorrhage, bleed	DR ASHFAQ
	PSYCHIATRY	Depression	HOD PSYCHIATRY
FRIDAY 8-1/2-3:00 pm	NEPHROLOGY SDL	AKI	DR H BALOCH

WEEK 3			
MONDAY 8-1:00 pm 1-3:00 pm	ENDOCRINOLOGY & DIABETES	Adrenal disorders	PROFESSOR WAQAR
	CLINICAL METHODS	RESPIRATORY	SR/PGT
TUESDAY 8-12:00 pm 12-3:00 pm	RHEUMATOLOGY OPD	Osteoarthritis	DR NADEEM
WEDNESDAY 8-2:00 pm 2-3:00pm	INF DISEASES/ ENV DIS/ POISONING	Malaria	DR NADIA
	HAEMATOLOGY	Myeloma	DR HINA
THURSDAY 8-1 pm 1-3 pm	NEUROLOGY	Epilepsy, EEG	DR ASHFAQ
	PSYCHIATRY	GAD	HOD PSYCHIATRY
FRIDAY 8-1/2-3:00 pm	NEPHROLOGY SDL	Renal tract infections	DR H BALOCH
WEEK 4			
MONDAY 8-1:00 pm 1-3:00 pm	ENDOCRINOLOGY & DIABETES	Pituitary disorders, cushing's	PROFESSOR WAQAR
	CLINICAL METHODS	CVS	SR/PGT
TUESDAY 8-12:00 pm 12-3:00 pm	RHEUMATOLOGY OPD	Gout	DR NADEEM
WEDNESDAY 8-2 pm 2-3 pm	INFECTIOUS DISEASES/ ENV DIS/ POISONING	Haemorrhagic fevers, dengue fever	DR NADIA
	HAEMATOLOGY	Lymphomas	DR HINA
THURSDAY 8-1:00 pm	NEUROLOGY	Parkinson's disease	DR ASHFAQ
1-3:00 pm	PSYCHIATRY	Schizophrenia	HOD PSYCHIATRY
FRIDAY 8-1/2-3:00 pm	NEPHROLOGY SDL	Nephrotic, nephritic, GN	DR H BALOCH

WEEK 5			
MONDAY 8-1:00 pm 1-3:00 pm	ENDOCRINOLOGY & DIABETES	Parathyroid disorders	PROFESSOR WAQAR
	CLINICAL METHODS	CNS - CRANIAL NERVES	SR/PGT
TUESDAY 8-12:00 pm 12-3:00 pm	RHEUMATOLOGY OPD	SLE	DR NADEEM
WEDNESDAY 8-2 pm 2-3 pm	INFECTIOUS DISEASES/ ENV DIS/ POISONING	Poisoning acute, CO, corrosive	DR NADIA
	HAEMATOLOGY	Leukaemia	DR HINA
THURSDAY 8-1:00 pm	NEUROLOGY	Multiple sclerosis/ Lumbar puncture/ CSF interpretation	DR ASHFAQ
1-3 pm	PSYCHIATRY	Organic disorders, Dementia, Delirium	HOD PSYCHIATRY
FRIDAY 8-1/2-3:00 pm	NEPHROLOGY SDL	Interstitial diseases of kidney, TIN, lupus, kidney in systemic diseases	DR H BALOCH
WEEK 6			
MONDAY 8-1:00 pm 1-3:00 pm	ENDOCRINOLOGY & DIABETES	Hyperthyroidism and hypothyroidism	PROFESSOR WAQAR
	CLINICAL METHODS	CNS - SENSORY SYSTEM	SR/PGT
TUESDAY 8-12:00 pm 12-3:00 pm	RHEUMATOLOGY OPD	Scleroderma, systemic sclerosis	DR NADEEM YOUSAF
WEDNESDAY 8-2 pm 2-3 pm	INF DISEASES/ ENV DIS/ POISONING	Snake bite, rabies	DR NADIA SHAMS
	HAEMATOLOGY	Blood transfusion, reactions, hazards Plasmapheresis, bone marrow, DIC	DR HINA ANDALEEB
THURSDAY 8-1:00 pm 1-3:00 pm	NEUROLOGY	MND, MS	DR ASHFAQ
	PSYCHIATRY	EEG, ECT, PSYCHOMETRIC ASESSMENT, COUNSELLING	HOD PSYCHIATRY
FRIDAY 8-1/2-3:00 pm	NEPHROLOGY SDL	Polycystic kidney disease, renal cell CA	DR HUSSAIN BALOCH

WEEK 7			
MONDAY 8-1:00 pm 1-3:00 pm	ENDOCRINOLOGY & DIABETES	Hypothyroidism	PROFESSOR WAQAR
	CLINICAL METHODS	CNS - MOTOR SYSTEM	SR/PGT
TUESDAY 8-12:00 pm 12-3:00 pm	RHEUMATOLOGY OPD	Ankylosing spondylitis	DR NADEEM YOUSAF
WEDNESDAY 8-2 pm 2-3 pm	INF DISEASES/ ENV DIS/ POISONING	HIV, needle prick injuries	DR NADIA SHAMS
	HAEMATOLOGY	ITP, TTP, HUS, platelet disorders. Bleeding disorders, clotting disorders, haemophilia	DR HINA ANDALEEB
THURSDAY 8-1:00 pm 2-3:00 pm	NEUROLOGY	Myasthenia gravis, EMG, NCS	DR ASHFAQ
	PSYCHIATRY	Personality disorders	HOD PSYCHIATRY
FRIDAY 8-1/2-3:00 pm	NEPHROLOGY SDL	Acid base, disorders, RRT, haemodialysis, renal transplant	DR HUSSAIN BALOCH
WEEK 8			
MONDAY 9-1:00 pm	ENDOCRINOLOGY & DIABETES	ENDOCRINOLOGY & DIABETES EXAM CLINICAL METHODS CVS	PROFESSOR WAQAR
TUESDAY 9-1:00 pm	RHEUMATOLOGY	RHEUMATOLOGY EXAM CLINICAL METHODS RESPIRATORY	DR NADEEM
WEDNESDAY 9-1:00 pm	INF / ENV DIS/ POIS & HEMATOLOGY	INF / ENV DIS/ POIS & HEMATOLOGY CLINICAL EXAM GIT	DR NADIA & DR HINA
THURSDAY 9-1:00 pm	NEUROLOGY & PSYCHIATRY	NEUROLOGY & PSYCHIATRY EXAM CLINICAL METHODS NEUROLOGY	DR ASHFAQ & HOD PSYCHIATRY
FRIDAY 9-1:00 pm	NEPHROLOGY	NEPHROLOGY EXAM	DR HUSSAIN BALOCH

DAILY TIME TABLE

8 -9:30 am	9:30 -10.00	10.00-11:00	11.00-12.45	12.45-1.15	1.15-3.00
LECTURE on Ppt	SDL	WARD ROUND	OPD	Lunch + Prayer break	PBL/procedures/ Clinical methods

Mini-CEX

Mini-CEX information: Encircle whichever is applicable										
Diagnosis:					Case setting: OPD IPD ER			Patient: New Follow-up		
Case complexity: Low Moderate High					Assessor Position/Rank:					
Focus of Mini-CEX: History & Physical examination Diagnosis Management Counseling										
Mini-CEX Scoring: encircle against N/A if not observed or applicable										
Medical Interview	N/A	1	2	3	4	5	6	7	8	9
Physical examination	N/A	1	2	3	4	5	6	7	8	9
Professionalism	N/A	1	2	3	4	5	6	7	8	9
Clinical Judgment	N/A	1	2	3	4	5	6	7	8	9
Counseling & communication Skill	N/A	1	2	3	4	5	6	7	8	9
Overall Rating	1	2	3	4	5	6	7	8	9	10
ssessor's Comments on Students performance										
Anything Especially Good					Suggestions For Development					
Agreed Actions (To be written by student):										
Student Satisfaction	1	2	3	4	5	6	7	8	9	Time for observatin:
ssessor's Satisfaction	1	2	3	4	5	6	7	8	9	Time for feedback:

Assessor Name: Assessor Signature:

A: Clinical Assessment			
#	Activities	MAX Scores %	Score
1	OSCE	40	
2	Long case	30	
3	Short case	15 + 15	
TOTAL		100	

Clerkship Director_____

B: Theory Assessment			
#	Activities	MAX Scores	Scores
1	MCQs	60	
2	SAQs	40	
TOTAL		100	

Clinical Checklist

Mark tick each competencies when gained

General Physical Examination	General Physical Examination	GIT examination____
☐ Pulse ___ ☐ Blood pressure ___ ☐ Temperature_____ ☐ Respiratory rate ___ ☐ BMI___	☐ Pallor___ ☐ Jaundice____ ☐ Examination of nails___ ☐ Clubbing____ ☐ Palmar erythema___ ☐ Tremors___ ☐ Thyroid____ ☐ Lymph nodes___	☐ Inspection____ ☐ Palpation____ ☐ Percussion___ ☐ Auscultation___ ☐ PR examination___ ☐ Observation of Upper GI endoscopy ☐ Obs. of Colono/ sigmoidoscopy
CVS Examination	Respiratory Examination	Musculoskeletal examination
☐ JVP___ ☐ Pulsusparadoxus___ ☐ Radio radial delay___ ☐ Radio femoral delay___ ☐ Inspection___ ☐ Palpation___ ☐ Auscultation, heart sounds, added sounds___ ☐ ECG___ ☐ Obs of Echocardiogram___ ☐ Obs of ETT___	☐ Inspection___ ☐ Palpation___ ☐ Percussion___ ☐ Auscultation___ ☐ Pulse oximetry___ ☐ Inhaler technique___ ☐ ABGs interpretation ☐ Oxygen administration___ ☐ Ventilatory support___ ☐ Arterial blood gases___ ☐ Endotracheal intubation___	☐ Examination of hand joints__ ☐ Large joint examination___ ☐ Gait___ Procedures ☐ IV canula___ ☐ IM/ SC and IV injections___ ☐ Lumbar puncture___ ☐ CVP line___ ☐ CPR___ ☐ Introduction to crash cart/ emergency medications__
CNS Examination Cranial nerves	Motor System	Sensory System
☐ I,II ☐ III, IV, VI ☐ V, VII ☐ VIII, IX, X ☐ XI, XII	☐ Bulk ☐ Tone ☐ Power ☐ Superficial Reflexes ☐ Deep Reflexes	☐ Superficial/ deep sensations ☐ Touch, pain, temperature

SURGERY

Introduction to Surgery Clerkship

Clerkship is full time clinical attachment of 5th year undergraduate student and shall consist of eight weeks of Surgery and allied specialities including; Orthopaedic surgery, Neurosurgery, Anaesthesia, Radiology and Urology to facilitate learning a wide variety of clinical situations.

OBJECTIVES

- Records a proper history (K, S)
- Employs appropriate communication skills (S, A)
- Demonstrates appropriate professional behavior (A)

Performs thorough physical examination.(S, A)

- Generates a problem list and debates differential diagnosis on logical basis (K, S)
- Explains how data that is obtained from the history and physical examination will affect the likelihood of these diagnostic possibilities for each problem (Critical Thinking (CrT)
- Suggests a working diagnosis (K, CrT)
- Chooses appropriate investigations relevant to the case (K, Action Plan AcP)
- Interprets the diagnostic tests and plans line of treatment (Analytical)
- Employs Evidence Based Medical Practice (ScA, Adv)
- Performs specified basic procedures on simulated patients/models
- Demonstrates skills to provide basic trauma life support (ABCDE)

K	=	Knowledge
S	=	Skills
A	=	Attitude
CrT	=	Critical Thinking
AcP	=	Action Plan
ScA	=	Scholarly activity
Adv	=	Advocacy

Procedural skills SCIL LAB.

Application of antiseptic and aseptic techniques (Sterilization, skin preparation)
Skin suturing, removal of stitches
Dressing of wound
Application of Bandages
DRE (Digital rectal examination)
Peripheral venous line insertion
N/G tube Insertion
Writing a request for histopathology / microbiology / plain and contrast Radiology /CT scan/ MRI / Ultrasongraphy

CLERKSHIP PROGRAMME

- Students will be divided into four groups; A, B, C & D
- On Monday the batch will go to urology and on Tuesday to orthopedics.
- In the clinicals, the batch will be divided into four groupsA, B, C & D and each group Will be assigned OPD/IPD/OT duties
  On the last Thursday of the 8th week assessment will be done

Weeks	Surgery	OPD	IPD	OT
Week 1	A+B+C+D	A+B	C	D
Week 2		C+D	A	B
Week 3		A+B	D	C
Week 4		C+D	B	A
Week 5		A+B	C	D
Week 6		C+D	A	B
Week 7		A+B	D	C
Week 8	Written & OSCE	C+D	B	A

There should be at least 8 clinical encounters &1 presentation by each student.

Surgery Team

Teaching Staff	Supportive Staff
HOD & Prof. Dr. Syed Aslam Shah	Computer Operator(Mr. Raja Arslan)
Associate Prof DrAlam	
Assistant Professor Dr. SairaMahmood	
Prof .DrNaeem (Urology)	
Prof. DrGen.Shahab (Anesthesia)	
Prof. DrAbdus Salam (Radiology)	
Dr. NaveedGul (Orthopaedics)	
Dr. Muhammad Khalid (Neuro surgery)	

Activities

08:00 am-09:15 am	Case based discussion (Problem Based learning)	5th Year Tutorial Room 4th floor
09:15 am-10:15 am	LGIS Interactive Session	5th Year Tutorial Room 4tht Floor
10:15 am-11:00 am	Clinicals (OPD/IPD/OT)	1st Floor OPD.2nd Floor OT ,4th Floor Surgical Wards
11:00 am-11:30 am*	Break	5thYear Tutorial Room 4tht Floor
11:30 pm-01:00pm*	Clinicals (OPD/IPD/OT)	1st Floor OPD.2nd Floor OT ,4th Floor Surgical Wards
1.00 pm-2.00 pm	Student Presentation	5th Year Tutorial Room 4th Floor
2.00 pm-3.00 pm	Self Directed learning (SDL)	Library Basement /Surgical Wards 4th Floor

COMMON AND IMPORTANT TOPICS IN SURGERY & ALLIED DISCIPLINES

GENERAL SURGERY

- Introduction
- Fluid and Electrolytes
- Acid Base Balance
- Shock
- Burns
- Metabolic response to injury
- Surgical wounds : Classification, Healing and Management

Surgical Infections

- Sterilization and Disinfection
- Skin and Soft Tissue Swellings
- Preoperative Assessment and Preparation
- Postoperative Care and Complications (including DVT)

Nutrition

- Ulcers, Sinuses, Fistulas

Varicose Veins

- Acute limb ischaemia
- Chronic limb ischaemia

ABDOMEN

- Dysphagia
- Gastric Outlet Obstruction

Acute Abdomen

- Peritonitis
- Acute Appendicitis
- Acute Cholecystitis
- Acute Pancreatitis
- Obstructive Jaundice
- Intestinal obstruction
- Upper & Lower GI Bleeding
- Benign Anorectal Conditions
- Hernias
- Scrotal Swellings

ENDOCRINE

- Thyroid Swelling
- Breast Lump

TRAUMA

- Overview
- Primary / Secondary Survey

Abdominal Trauma

- Chest Trauma
- Head Injury
- Spinal Injury

ORTHOPAEDICS

- Limb Trauma (Closed and open fractures)
  - Upper limb
  - Lower limb
- Bone and Joint Infections including tuberculosis
- Arthritis - Surgical Aspects
- Bone and joint tumours
- Peripheral Nerve and Vessel injuries
- Common Congenital Deformity

ANESTHESIA

- General Anesthesia
- Local & Regional Anesthesia
- Pain and its Management

RADIOLOGY

- Identification and identification of common radiographic images in surgery
- Interpretation of contrast studies such as Flouroscopy, CT scans and MRI scans
- Interpretation of ultrasound examinations
- Interpretation of nuclear scans

NEUROSURGERY

- Head and spinal trauma
- Management of unconscious
- Management of paraplegics
- Head and neck tumours
- Management of backache

UROLOGY

- Urinary symptoms and investigations
- Kidneys and ureters
- The Urinary bladder
- Prostate and seminal vesicals
- Urethera and Penis
- Testes and scrotum

LEARNING OBJECTIVES

Theme Abdominal Pain

S.no	By the end of the clerkship students will be able to Learning Objectives	Content areas	Teaching strategy	Venue	Assessment Tools
01	To describe: • The pathway for clinical diagnosis of a patient presenting with an abdominal complaint. • The importance of recognizing the organ or system responsible for the clinical features. • The pathophysiological basis of common abdominal symptoms and signs.	History and examination of the abdomen	SGD	Final Year Tutorial Room 4th Floor OPD & IPD	OSPE
02	To describe: • The basic anatomy of the abdominal wall and its weaknesses. • The causes of abdominal hernia. • The types of hernia and classifications. • The clinical history and examination findings in hernia. • The complications of abdominal hernia. • The non-surgical and surgical management of hernia-including mesh. • The complications of hernia surgery. • The other abdominal wall conditions.	Abdominal wall, hernia and umbilicus	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
03	To describe: • The causes and complications of localised and generalised peritonitis. • The clinical features of peritonitis and intraperitoneal abscess. • The principles of surgical management in patients with peritonitis and intraperitoneal abscess. The causes and pathophysiology of ascites. • The pathophysiology and complications of adhesion formation. • The spectrum of mesenteric and retroperitoneal conditions.	The peritoneum, omentum, mesentery and retroperitoneal space	LGIS	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE

04	To describe: • The anatomy and physiology of the oesophagus and their relationship to disease. • The clinical features, investigations and treatment of benign and malignant disease with particular reference to the common adult disorders.	<u>The oesophagus</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
05	To describe: • The gross and microscopic anatomy and pathophysiology of the stomach in relation in disease. • The able to decide on the most appropriate techniques to use in the investigation of patients with complaints relating to the stomach and duodenum. • The critical importance of gastritis and Helicobacter pylori in upper gastrointestinal disease. • The able to investigation and treatment peptic ulcer disease and its complications. • The able to recognise the presentation of gastric cancer and understand the principles involved in its treatment. • The causes of duodenal obstruction and the presentation of duodenal tumours.	<u>Stomach and duodenum</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
06	To describe: • How severe and complex obesity is. • Rationale for surgery and the concept of metabolic surgery. • The eligibility and NICE guideline. • Multidisciplinary assessment. • The common operations and how they work. • How to assess and treat perioperative complications. • The Follow-up, nutritional supplements and biochemical monitoring.	<u>Bariatric and metabolic surgery</u>	LGIS SGD	Final Year Tutorial Room 4th Floor	MCQS,SEQS, OSPE

07	To describe: • The anatomy of the liver. • The signs of acute and chronic liver disease. • The investigation of liver disease. • The management of liver trauma. • The management of liver infections. • The management of colorectal liver metastases. • The management of hepatocellurlar carcinoma.	The liver	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
08	To describe: • The function of the spleen. • The common pathologies involving the spleen. • The principles and potential complications of splenectomy. • The potential advantages of laparoscopic splenectomy. • The benefits of splenic conservation. • The importance of prophylaxis against infection following splencectomy.	The spleen	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
09	To describe: • The anatomy and physiology of the gallbladder and bile ducts. • The pathophysiology and management of gallstones. • The unusual disorders of the biliary tree. • The malignant disease of the gallbladder and bile ducts.	The gallbladder and bile ducts	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
10	To describe: • The anatomy and physiology of the pancreas. • The investigations of the pancreas. • The congenital abnormalities of pancreas. • The assessment and management of pancreatitis. • The diagnosis and treatment of pancreatic cancer.	The pancreas	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE

11	To describe: • The aetiology and pathology of common small intestinal conditions. • The principles of investigation of small intestinal symptoms. • The importance of non-surgical management of small intestinal problems. • The principles of small intestinal surgery. • The management of acute surgical problems of the intestines.	<u>The small intestine</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
12	To understand: • The aetiology and surgical anatomy of acute appendicitis. • The clinical signs and differential diagnoses of appendicitis. • The investigation of suspected appendicitis. • The evolving concepts in management of acute appendicitis. • The basic surgical techniques, both open acute appendicitis and laparoscopic. • The management of postoperative problems. • The tumours of the appendix and pseudomyxomaperitonei.	<u>The vermiform appendix</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
13	To describe: • The pathophysiology of dynamic and adynamic intestinal obstruction. • The cardinal features on history and examination. • The causes of small and large bowel obstruction. • The indications for surgery and other treatment options in bowel obstruction.	<u>Intestinal obstruction</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE

14	To describe: • The aetiology and pathology of common large intestinal conditions. • The principles of investigation of large intestinal symptoms • The importance of non-surgical management of large intestinal problems. • The principles of colonic surgery. • The management of acute surgical problems of the intestines.	<u>The large intestine</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
15	To describe: • The surgical anatomy of the rectum. • The pathology, clinical presentation, investigation, differential diagnosis and treatment of diseases that affect the rectum.	<u>The rectum</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
16	To describe: • The anatomy of the anus and anal canal and their relationship to surgical disease and its treatment. • The pathology, clinical presentation, investigation, differential diagnosis and treatment of diseases that affect the anus and anal canal. • That any damage to the anus, including too aggressive or inappropriate surgery, may render the patient permanently disable.	<u>The anus and anal canal</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE

Theme Breast Pain					
17	To describe: • The appropriate investigation of breast disease. • The breast anomalies and the complexity of benign breast disease. • The aetiology , risk factors and presentation of breast cancer. • The treatment option in breast cancer.	<u>The breast</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
18	To describe: • The anatomy of the parathyroid glands. • The pnysiology of calcium regulation. • The underlying causes of hypercalcaemia and appropriate emergency management. • The aetiology, presentation, investigation and management of primary hyperparathyroidism and associated special cases. • The aetiology, presentation, investigation and management of secondary and tertiary hyperparathyroidism. • The aetiology and management of parathyroid carcinoma.	<u>The parathyroid glands</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
19	To describe: • The anatomy and function of the adrenal and other abdominal endocrine glands. • The diagnosis and management of these endocrine disorders. • The role of surgery in the management of these endocrine disorders.	<u>The adrenal glands and other abdominal endocrine disorders</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE

20	To describe: - The development and anatomy of the thyroid gland. - The physiology and investigation of thyroid function. - The appropriate investigations for thyroid swellings. - The enumerate indications of operate in thyroid disease when to operate on a thyroid swelling. - The thyroidectomy. - The risks and complications of thyroid surgery.	<u>The thyroid gland</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
	Cardiothoracic Surgery				
21	To describe: - The planning surgery. - The management of coronary heart disease. - The role of surgery in valvular heart disease. - The special role of surgery in congenital heart disease. - The management of aortic vascular and pericardial disease.	<u>Cardiac surgery</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
	To describe: - The anatomy and physiology of the thorax. - Investigation of chest pathology. - The role of surgery in pleural disease. - The assessment of patients requiring lung surgery. - The surgical oncology as applied to chest surgery.	<u>The thorax</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE

Vascular Surgery					
22	To describe: • The nature and associated features of occlusive peripheral arterial disease. • The investigation and treatment options for occlusive peripheral arterial disease. • The principles of management of the severely ischaemic limb. • The nature and presentation of peripheral aneurysmal disease, particularly of the abdominal aorta. • The investigation and treatment options for peripheral aneurysmal disease. • The arteritides and vasospastic disorders.	<u>Arterial disorders</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
23	To describe: • The venous anatomy and the physiology of venous return. • The pathophysiology of venous hypertension. • The clinical significance and management of superficial venous reflux. • The management of venous ulceration. • The venous thromboembolism.	<u>Venous disorders</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
24	To describe: • The main functions of the lymphatic system. • The development of the lymphatic system. • The various causes of limb swelling. • The aetiology, clinical features, investigations and treatment of lymphoedema.	<u>Lymphatic disorders</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE

25	To describe: • The significance of pain relating to urinary tract pathology. • The difference between renal pain and ureteric colic. • The definations of common lower urinary tract symptoms. • The able to select the appropriate diagnostic tests to establish a diagnosis of urinary tract disease.	<u>Urinary symptoms and investigation</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
26	To describe: • The important congenital abnormalities of the upper urinary tract. • The important cystic diseases of the kidney. • The management of sepsis in the upper urinary tract. • The pathophysiology of renal stone formation. • The management of urinary tract calculi. • The aetiology, presentation and surgical management of obstruction to the upper urinary tract. • The management of open and closed trauma to the kidney and ureter. • The important renal neoplasms and their presentation. • The surgery of upper urinary tract tumours.	<u>Kidneys and ureters</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
27	To describe: • The anatomy, vascular supply and innervations of the bladder in relation to function and disease. • The principles of management of bladder trauma, incontinence and fistulae. • The common causes of acute and chronic urinary retention and management. • The different types of bladder cancer and the principles of management.	<u>The urinary bladder</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE

28	To describe: • The relationship of anatomical structure and biochemical function to the development and treatment of benign and malignant disease of the postate. • The terminology used to describe lower urinary tract symptoms and to know their causes as well as the treatment options available. • Which investigations are appropriate for carcinoma of the prostate. • The clinical staging of carcinoma of the prostate and how staging contributes to the complex decision.	<u>The prostate and seminal vesicles</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
29	To describe: • The common congenital abnormalities of the urethra. • The diagnosis and management of urethral trauma. • The diagnosis and management of urethral structure. • The diagnosis and management of phimosis. • The principles of management of a man with erectile dysfunction. • The common diseases of the penis and urethra and the principles of their surgical management.	<u>Urethra and penis:</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
30	To describe: • The recognise testicular maldescent and to appreciate the reasons for intervention. • The recognise and manage testicular torsion. • The clinical and management of the common scrotal swellings (varicocoele, hydrocoele and epididymal cysts). • The clinical features and understand the management of testicular tumours. • The treatment options for infertile men.	<u>Testis and scrotum</u>	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE

Transplantation					
31	To know: - The immunological basis of allograft rejection. - The principles of immunosuppressive therapy. - Be aware of the side effects of non-specific immunosuppression. - The familiar with the major issues concerning organ donation. - Appreciate the man indications for organ transplantation. - The surgical principles of organ implanation. - Be able to give an account of the causes of graft dysfunction. - The likely outcomes after transplantation. - Be aware of potential future developments in transplantation.	Approach Transplantation	LGIS SGD	Final Year Tutorial Room 4th Floor OPD & IPD	MCQS,SEQS, OSPE
Elective Orthopaedics					
32	To describe: - The important issues behind a patient's sporting injury in the context of taking a history. - The common sports injuries. - The appropriate ways of imaging to confirm or refute a diagnosis. - The patient and offer treatment and rehabilitation plans.	Sports medicine and sports injuries	LGIS		MCQS,SEQS, OSPE
33	To describe: - The salient features relating to the history and examination of the spine. - The investigations commonly used in the field of spinal disorders. - The treatment principles for common conditions affecting the spine. - The global issues in spinal surgery.	The spine	LGIS		MCQS,SEQS, OSPE
34	To describe: - The anatomy and physiology relevant to upper limb pathology. - The diagnosis and treatment of common upper limb conditions.	Upper limb	LGIS		MCQS,SEQS, OSPE

35	To describe: • The anatomy and biomechanics of the hip and knee and their clinical implications. • The clinical presentation, aetiology and management of common hip and knee pathologies. • The principles of joint replacement including important complications. • The advances in surgical practice in this field.	Hip and knee	LGIS		MCQS,SEQS, OSPE
36	To describe: • The basic anatomy and biomechanics of the foot and ankle. • The common problems affecting the foot and ankle in each age group. • The principles behind the treatment of each condition, be it conservative or surgical. • The significance of progressive neurological diseases.	Foot and ankle	LGIS		MCQS,SEQS, OSPE
37	To describe: • The symptoms and signs associated with a musculoskeletal tumour. • Understand why a patient with a suspected musculoskeletal tumour should be referred to a specialist centre for staging , biopsy and multidisciplinary management. • Understand why staging should be completed before biopsy. • Explain why a diagnosis is required before treatment. • Understand the principles of biopsy. • The principles of surgical treatment of musculoskeletal tumours. • The list of aims of surgical treatment for metastatic bone disease. • How to manage patients with an impending or completed pathological fracture. • Evaluate the risk of pathological fracture.	Musculoskeletal tumours	LGIS		MCQS,SEQS, OSPE

38	To describe: • The characteristic features in the history and examination of infection of bone and joint. • The diagnostic principles in bone and joint infection. • The treatment of infection of native bone and joint. • The treatment of implant-associated orthopaedic infection.	Infection of the bones and joints	LGIS		MCQS,SEQS, OSPE
39	To describe: • The normal and abnormal development of the musculoskeletal system. • The normal variants versus pathological deformity. • The diagnosis and treatment of developmental hip dysplasia. • The presentation and management of other childhood hip conditions. • The management of clubfoot. • The problems associated with musculoskeletal infection in childhood.	Paediatricorthopaedics	LGIS		MCQS,SEQS, OSPE
Principle of paediatric Surgery					
40	To describe: • The clinically important difference between adults and children. • The principles of trauma management in children. • The safely pre scribe perioperative fluids in children. • Avoid the pitfalls that often delay the diagnosis of common emergency conditions. • The outline some congenital malformations managed by neonatal surgeons that may present later to general surgeons. • The recognise common safeguarding issues in children and know how to proceed if abuse is suspected.	Principle of paediatric surgery	LGIS		MCQS,SEQS, OSPE

Date	Theme	Topics	Presenter
Week -1			
Monday 6th Jan 2020	Urology	Lower Urinary tract sign and symptons History taking and clinical methods	Prof Naeem SR/PGT
Tuesday 7th Jan 2020	Orthopedics	Fracture /Trauma History taking and clinical methods	Dr. Naveed Gull
Wednesday 8th Jan2020	Pain Abdomen	Peritonitis History taking and clinical methods	Dr. Muhammad Alam DrSaira,Registrar/PGT
Thursday 9thjan 2020	Acute Abdomen	Abdominal wall hernias ,DDx of acute abdomen , History taking and clinical methods	Prof . Syed Aslam Shah Dr Saira, Registrar/PGT
Friday 10-Jan-2020	Abdominal Mass	Abdominal wall Hernias,DDx of abdominal mass History taking and clinical methods	Prof.Dr .Syed Aslam Shah Dr. Muhammad Alam, Registrar/PGT
Week -2			
Monday 13TH Jan 2020	Urology	Urolithiasis History taking and clinical methods	Prof Naeem SR/PGT
Tuesday 14Th Jan 2020	Orthopedics	Congenital deformities History taking and clinical methods	Dr. Naveed Gull
Wednesday 15th Jan2020	Anesthesia	General Principles History taking and clinical methods	Prof. ShahabNaqvi Dr. Saira, Registrar /PGT
Thursday 16thjan 2020	Abdomen	Stomach and duodenum(1) History taking and clinical methods	Prof. Aslam Shah Dr.Alam, Registrar /PGT
Friday 17-Jan-2020	Abdomen	Stomach and duodenum(2) History taking and clinical methods	Prof. Aslam Shah Dr. Saira, Registrar /PGT

Week -3			
Monday 20TH Jan 2020	Urology	Renal tumors History taking and clinical methods	Prof Naeem Registrar/PGT
Tuesday 21st Jan 2020	Orthopedics	Bone tumors,Arthralgia, arthritis History taking and clinical methods	Dr. Naveed Gull
Wednesday 22nd Jan2020	Abdomen	Esophagus (1) ,Benign condition causing dyshagia History taking and clinical methods	Dr Saira, Registrar/PGT
Thursday 23rdjan 2020	Anesthesia	Local and regional anesthesia History taking and clinical methods	Prof ShahabNaqvi
Friday 24th -Jan-2020	Abdomen	Ca esophagus History taking and clinical methods	Dr Saira, Registrar/PGT
Week- 4			
Monday 27th Jan 2020	Abdomen	Liver(1) History taking and clinical methods	Prof. Syed Aslam Shah, Registrar/PGT
Tuesday 28th Jan 2020	Abdomen	Liver (2) History taking and clinical methods	Prof. Syed Aslam Shah, Registrar/PGT
Wednesday 29th Jan2020	Abdomen	The gall balder and bile ducts History taking and clinical methods	Dr .saira , DrAlam, Registrar/PGT
Thursday 30thjan 2020	Abdomen	Pancreas (Acute and chronic pancreatits) History taking and clinical methods	Prof. Syed Aslam Shah, Registrar/PGT
Friday 31st -Jan-2020	Abdomen	Pancreas(CA Pancreas) History taking and clinical methods	Prof. Syed Aslam Shah, Dr Saira, Registrar/PGT

Week- 5			
Monday 3rd -Feb-2020	Abdomen	Intestinal obstruction History taking and clinical methods	Prof. Syed Aslam Shah, Registrar/PGT
Tuesday 4th -Feb-2020	Abdomen	The rectum History taking and clinical methods	Prof. Syed Aslam Shah, Registrar/PGT
Wednesday 5th -Feb-2020	Abdomen	Anal canal History taking and clinical methods	Prof. Syed Aslam Shah, Dralam, Registrar/PGT
Thursday 6th -Feb-2020	Abdomen	The vermiform appendix History taking and clinical methods	Dr Saira, Registrar/PGT
Friday 7th-Feb-2020	Abdomen	Small and large intestine History taking and clinical methods	Dralam, Dr Saira, Registrar/PGT
Week- 6			
Monday 10th -Feb-2020	Abdomen	The spleen History taking and clinical methods	Dralam, Registrar/PGT
Tuesday 11th -Feb-2020	Vascular	Arterial disorders (1) History taking and clinical methods	Prof aslam shah, Registrar/PGT
Wednesday 12th -Feb-2020	Vascular	Arterial disorders 2 History taking and clinical methods	Prof aslam shah, Dralam, Registrar/PGT
Thursday 13th -Feb-2020	Vascular	Venous disorders History taking and clinical methods	Prof aslam shah, Registrar/PGT
Friday 14th -Feb-2020	Vascular	Lymphatics History taking and clinical methods	Dralam, Drsaira, Registrar/PGT

Week-7			
Monday 17th -Feb-2020	Endocrinology	Thyroid 1 History taking and clinical methods	Prof aslam shah Registrar/PGT
Tuesday 18th -Feb-2020	Endocrinology	Thyroid 2 History taking and clinical methods	Prof aslam shah Registrar/PGT
Wednesday 19th -Feb-2020	Endocrinology	Parathyroid History taking and clinical methods	Prof aslam shah Registrar/PGT
Thursday 20th -Feb-2020	Endocrinology	Adrenals History taking and clinical methods	Prof aslam shah Registrar/PGT
Friday 21st -Feb-2020	Breast	Benign conditions of breast History taking and clinical methods	Drsaira Registrar/PGT
Week-8			
Monday 24th -Feb-2020	Breast	Ca breast History taking and clinical methods	Drsaira Registrar/PGT
Tuesday 25th -Feb-2020	Thorax	Benign conditions of chest History taking and clinical methods	Dralam Registrar/PGT
Wednesday 26th -Feb-2020	Thorax	Ca lung History taking and clinical methods	Dralam Registrar/PGT
Thursday 27th -Feb-2020	Radiology	X ray, ultrasounds, ct scan, barium swallow	Consultant radiology
Friday 28th -Feb-2020	Pediatrics surgery	General principles of pediatrics sugery	Consultant pediatric surgery
Week-9			
Monday 2nd -March-2020	Urology/Assessment	Clinical Examination/Viva/osce	Prof. Naeem Registrar/PGT
Tuesday 3rd -March-2020	Orthopedics /Assessment	Clinical Examination /viva /osce	DrNaveed Gull
Wednesday 4th -March-2020	G.Surgery/Assessment	Osce	Drsaira Registrar/PGT
Thursday 5th -March-2020	G.Surgery/Assessment	Short Case	Prof aslam shah Dr Saira ,Registrar/PGT
Friday 6th- March-2020	G.Surgery/Assessment	Long Case	Prof aslam shah Dr Saira, Registrar/PGT

Fluid and Electrolytes

Acid Base Balance

1. A 45 year old man with previously known duodenal ulcer disease presents with complaints of persistent vomiting for the past 36 hours. The vomit is clear-looking and acidic in taste. He has no abdominal pain. Prior to the vomiting, he had difficulty with solid foods causing "fullness" in the stomach and he had been taking only liquids for one week. His heartburn had been aggravated at the time of the "fullness", but antacids did not help and he did not seek medical attention until today. He complains of being dizzy when he stands up. His blood pressure changes from 120/70 when lying to 105/55 when standing, his pulse changes from 100 to 130.

Study Questions:

What is the most likely acid-base disturbance in the patient?

What percentage of intravascular volume has been lost? What is the likely diagnosis?

How much would be needed to replace the intravascular volume deficit?

What would be the sodium, potassium, and hydrogen ion concentration in the urine?

2. A 72 year old man is admitted with painless jaundice of two weeks duration. Ultrasound demonstrates markedly dilated bile ducts with no gallstones. He undergoes transhepatic cholangiography which demonstrates an obstructing lesion in the distal common bile duct. A decision is made to leave a catheter in the duct to drain the bile pending surgical evaluation. The first 48 hours after the catheter is placed it drains 1000 mls in 24 hours.

Study Questions:

What do you think is the composition of draining bile?

What intravenous fluid would you administer to replace the fluid and electrolytes lost in this patient?

3. A 36 year old man has undergone a total colectomy and proctectomy for ulcerative colitis two years previously, and has an ileostomy which usually drains about 800 mls per day. Two days before coming to the hospital he developed crampy abdominal pain, bloating, and began draining large quantities of liquid from his ileostomy. Because of nausea and two episodes of vomiting he did not take any food or liquids over the past 24 hours. Patients pulse is 100/m, BP is 100/60 mm of Hg and tongue is dry.

Study Questions:

What is the likely diagnosis and metabolic disturbances?

What laboratory tests would you order to assess the degree of dehydration and what alterations would you expect?

What intravenous fluid would you administer to replace the ileostomy output?

4. A postop thyroidectony patient is noted to be oliguric with urine output of 10-15 ml/hr for the past eight hours. Pulse is 110/m. Urea level of 15 increases to 40 and creatinine of 1.0 to 1.5. The urine specific gravity is 1.030.

Study Questions:

What are possible causes of this oliguria?

What renal mechanisms are most likely responsible for the specific gravity of the urine and the urine electrolytes?

How you will manage the patient?

5. A 65 year old man with known congestive heart failure treated with digoxin and a diuretic undergoes an uneventful abdominal aortic aneurysm repair with 1 L of blood loss. During the four hours of surgery he is administered 4 L of lactated Ringer's solution. During his first eight hours after surgery he is administered 1 L of lactated Ringer's, has made 250 mls of urine and has drained 200 mls from a nasogastric tube.

Study Questions:

What are the fluid and electrolyte losses is this patient?

What methods would you use to evaluate the intravascular volume status in this patient eight hours after surgery?

What methods would you use to evaluate the total body fluid status of this patient?

How you will correct all these?

6. A 75 year old woman who lives alone was discovered lying on the floor of her apartment by her husband. She is brought to the emergency room by ambulance, and does not respond to commands. Her blood pressure is 120/70, pulse is 110, respirations 30 and temperature is 37oC. She is moving all extremities. Her abdomen reveals a lower midline scar and a stoma in the left lower quadrant with dark yellow fluid in a stoma bag. Her past history is not available. Arterial blood gases show pH of 7.25 Serum electrolytes are Na 145, Cl 123, K 6.5, PC02 15, glucose 106.

Study Questions:
What is the acid-base disorder in this patient?
What are possible causes of this disorder?
What is the treatment for this disorder?
How much will pH be altered for each incremental change in pC02 for both acute and chronic conditions?

7. An 18 year old man was in a motorcycle accident; he was not wearing his helmet. He suffered a severe closed head injury with diffuse swelling of both cortices. He remains comatose three days after injury and is noted to have a urine output of 500 mls per hour. The specific gravity of the urine is 1.000 and his serum electrolytes demonstrate a sodium of 155, chloride of 125, potassium of 4.5 and PC02 of 25.

Study Questions:
What is the differential diagnosis of hypernatremia?
What is the most likely cause in this patient?
How would you confirm the diagnosis?
What treatment would you give?

8. A 55 year old woman with alcoholic cirrhosis and ascites is admitted for upper intestinal bleeding. Upper GI endoscopy reveals gastritis which is not actively bleeding. She is admitted and given an intravenous of 5% dextrose at 125 mls/hr. Over the next 24 hours her abdomen becomes tense and her urine output is 15 to 20 mls per hour. Her serum sodium has decreased from 132 on admission to 122 and she is less responsive to verbal stimuli.

Study Questions:
What are possible causes of hyponatremia?
What is the most likely cause in this patient?
What happens to urine sodium concentrations with the several causes listed above?
What is the treatment of hyponatremia in this patient?

9. A 55 year old man fell from a scaffold which was toppled by a large concrete block as it fell from a crane. His left leg was pinned under the concrete. After extrication, his leg below the knee was pale and motionless with moderate pain. The patient was transported to emergency room with a blood pressure of 110/60, pulse 120, temperature 37.5C, and respirations of 25 noted on admission. Insertion of a Foley catheter revealed dark brown coloured urine. ECG monitoring revealed peaked T waves. Serum electrolytes were Na 142, K 6.8, C1 106, PCO2 18. Serum urea was 25 and creatinine 2.0.

Study Questions:
What is the threatening electrolyte disturbance in this patient?
What are the causes of this abnormality?
What causes are likely in this patient?
What would the blood pH likely be in this patient (low, normal or high)?
What are the therapeutic options for this life-threatening electrolyte disturbance?

10. A 74 year old presents to the emergency room with a chief complaint of colicky abdominal pain of three days duration and constipation. The patient has repeatedly vomited a foul-smelling fluid for the past 48 hours. The patient feels weak and is unable to get out of bed since morning. She has been unable to retain any water or fruit juice. She has not voided for 12 hours. She underwent total abdominal hysterectomy at age 60 for a fibroid uterus. Physical examination: weight is 70kg; height is 65"; blood pressure is 100 systolic; pulse is 114/minute; temperature is 37.5C,

respiratory rate is 24/minute. The abdomen is distended with a lower midline scar and tympanic. Bowel sounds are hyperactive. There is percussion tenderness in the left lower quadrant, as well as involuntary guarding. Rectum is empty.
Laboratory studies: Haemoglobin = 16.8 gms, Hematocrit = 57%; WBC = 11,000; Na 126 mmol/1, ; K 3.4 mmol/1; C1-92 mmol/1; Anion gap 22 mmol/1(N-8-16), Urea 50 mg/dl(N-7-19); Creatinine 3.2 mg/dl(N-0.7-1.4); Arterial blood gases-pH 7.28(N-7.35-7.45); PaO288mmHg(N-75-100); PaCO238 mmHg(N-38-42); HCO3 12 mmol/1; Base excess-5; urine sp. gr. 1.031(N-1.003-1.025); urine pH 4.5(N-4.6-8.0).

Study Questions:
Based on the above data, what is the most likely diagnosis?
What acid-base alteration is indicated by the arterial blood gases?
Describe the mechanism of fluid and electrolyte losses in this patient.
Calculate the fluid and electrolyte losses suffered by this patient.
Outline the intravenous fluids and electrolytes required to manage the patient.

11. A 64 year old man has surgical resection of an abdominal aortic aneurysm with graft interposition. The operation is difficult and six units of packed cells are infused during the surgery. The patient's blood pressure twice fell to 70 systolic during the four-hour operation. Eight liters of crystalloid were administered, 500 mls of fresh frozen plasma, and 1,000 mls of Hetastarch. The patient came to the intensive care unit with a systolic blood pressure of 60 mmHg. Three additional units of blood were given before his pressure is over 100 mmHg systolic. The patient made 100 mls of urine output during the case but in the ICU is noted to be oliguric, with 5 to 10 mls of urine output during the first four postoperative hours. 500mls of colloid was given in the operating room and was repeated with no increase in urine output. During the next twelve hours six liters of crystalloid and 500 mls of packed red cells are administered resulting in 75 mls of dark yellow urine. By this time his haemoglobin and hematocrit have stabilized at 9.6 gms and 27.8%. Laboratory values are:
WBC 11,800, Urea 55 mg/dl, Creatinine 2.1 mg/dl, Na 134 mmol/l, K 5.8mmol/l, Urinalysis= sp. gr. 1.010, urine osmolarity 300 mOsm/L, no white or red cells, no granular casts, protein 2+, urine Na 45 mmol/l

Study Questions:
What can be the causes of oliguria?
What is the most likely diagnosis?
What is the most likely cause?
What is the natural history of this disease?
What are the principles of management of this disease?

12. A 71 year old man is subjected to an open cholecystectomy. After surgery he is extubated in the operating room and moved to the recovery room. There he becomes restless and arterial blood gases are drawn. Blood gases are reported:
PaO2 55 mmHg
PaCO2 62 mmHg
HCO3 12 mmol/l
pH 7.26

Study Questions:
What is the primary acid-base alteration in this patient?
How should this patient be managed?
What is the likely cause?

Shock

1. A 22 year old man after a very busy and tiring day was driving home without his seatbelt fastened when he was involved in a single-vehicle automobile accident. When attended at roadside by Rescue 1122, no information was available about the time of the accident. He was found agitated and complaining of abdominal pain. His airway was patent. At the scene, he was breathing at 20 per minute with a blood pressure of 90/60 and a pulse of 130. He was placed in a hard cervical collar and on a back board and transported to the emergency room. Upon arrival his vital

signs are the same, with a temperature of 36C. His abdomen is markedly distended. His hands and feet are cold, his legs mottled. A nasogastric tube reveals green liquid. A urinary catheter reveals dark yellow urine. His haemoglobin is 7. His abdominal lavage reveals gross blood.

Study Questions:
What type of shock does this patient exhibit?
Define the type of shock?
What alterations in oxygen delivery are present?
What acid/base category would be expected?
What is the effect of this kind of shock on the kidneys, the heart, the lungs, the brain, the intestine?
What would be the cardiac output?
What would be the systematic resistance?
What would be the central venous and/or pulmonary capillary occlusion pressure?
What therapy would reverse the shock?

2. A 65 year old man with known coronary artery disease (myocardial infarct three years earlier, currently taking a beta blocker) is admitted with acute left lower quadrant pain of six hours duration. His blood pressure is 90/50, pulse 120, respirations 18, temperature 39C. He is flushed with warm hands and warm feet, his legs are pink. Physical examination reveals findings consistent with peritonitis in the left lower quadrant.

Study Questions:
What is the possible diagnosis?
What type of shock does this patient exhibit?
What alterations in oxygen delivery are present?
What acid/base category would be expected?
What is the effect of this kind of shock on the kidneys, the heart, the lungs, the brain, the intestine?
What would be the cardiac output?
What would be the systemic resistance?
What would be the central venous and/or pulmonary capillary occlusion pressure?
What is the management?

3. A 55 year old man with stable angina which occurs twice a week while walking uphill and is treated with nitroglycerin undergoes an uneventful sigmoid resection for diverticular disease. On postoperative day four he develops severe substernal chest pain, sudden hypotension 85/55, tachycardia 120, and becomes agitated. Physical examination reveals total body mottling, cold hands and feet, distended neck veins and an S3 gallop. ECG demonstrates elevated ST-T wave segments in all of the anterior leads.

Study Questions:
What is the diagnosis?
What type of shock does this patient exhibit?
What alterations in oxygen delivery are present?
What acid/base category would be expected?
What is the effect of this kind of shock on the kidneys, the heart, the lungs, the brain, the intestine?
What would be the cardiac output?
What therapy would reverse the shock?

4. A 35 year old man dived into three feet of water at a swimming pool, did not emerge and was rescued by friends who performed CPR. Upon arrival he has blood pressure of 80/50, pulse 100, and no spontaneous respirations, although he was opening his eyes. He has warm hands and feet and pink extremities.

Study Questions:
What type of shock does this patient exhibit?
What alterations in oxygen delivery are present?
What acid/base category would be expected?
What is the effect of this kind of shock on the kidneys, the heart, the lungs, the brain, the intestine?

What would be the cardiac output?
What would be the systemic resistance?
What therapy would reverse the shock?

Burns

1. This 40 year old man was pulled from the bedroom of a burning house by firemen approximately one hour before admission to the hospital. He was able to state that he had no existing illness. His last tetanus toxoid booster was more than ten years before. Physical exam showed blood pressure at 100/60, pulse was 110, respirations 22. His face and neck were erythematous. There was some white, normal-appearing sputum when he coughed. The pharynx was normal in appearance. His entire left arm and upper half of his back showed blisters and erythema. The right arm and right leg were circumferentially brown, leathery, insensitive to pin prick, and thrombosed blood vessels were visible through the skin. At this time a haematocrit was 48. A Foley catheter produced about 100 ml of dark, yellow urine.

Study Questions:
What depth of burns are represented in this patient?
What is the percent of body surface area involved with each burn category in this patient?
What is the evidence for and against inhalation injury in this patient?
Calculate the fluid requirements for this patient for the first 24 hours post burn. How much of this fluid should be given in the first eight hours?
Why is this patient haemoconcentrated?
Does this patient need antibiotics?
How will you take care of his burn wounds?

2. The same patient is now 12 hours post burn. The toes and fingers of the right leg and arm are observed to be cold and cyanotic with very slow capillary refill. The urine output has been 10 ml for the past hour. His haematocrit is now 55. Blood pressure is 80/60, pulse is 125, respirations 22.

Study Questions:
Why is his blood pressure low, his urine output down, and his haematocrit rising? What is the pathophysiology behind these events?
What steps will you take to correct this problem?
What is the explanation for the change in appearance of the toes and fingers of the right extremities?
What needs to be done in order to alleviate this problem?

3. The patient is now seven days post burn. At this time he is able to tolerate clear liquids only. His blood pressure is 120/60, pulse is 110, temperature is 38oC. His weight is 70 kg. His haematocrit is 45. His urine output is quite adequate and he complains of some pain for which he receives analgesics. His face and neck appear essentially normal.

Study Questions:
What is the caloric requirement of this patient?
As he is tolerating clear liquids only, how could you improve his caloric intake?
How can you tell if his caloric needs are being met at this time?

4. On post burn day 10, during morning rounds the patient was noted to be alert and cooperative. He has expressed some interest in food. However, during the evening of the same day it is noted that he sensorium is somewhat dulled. His urine output is found to have fallen off to 15 ml in the previous two hours. His blood pressure is 80/60, pulse is 130, respirations 30 and temperature is 40C. Careful physical examination results at this time are otherwise unchanged from the morning.
Chest x-ray is clear. The urinalysis shows a few RBCs and 2-5 WBCs per high powered field; no bacteria. WBC is 22,000.

Study Questions:
What is the probable explanation for this turn of events?

What diagnostic steps will you take to elucidate the problem?
What immediate steps will you take in regard to therapy with:
a. fluids? b. antibiotics?

5. You are called to emergency room because a boiler has exploded at a nearby chemical plant. The patients you see are:

a. The first patient is a 30 year old man. He gives a history of working on a transformer at the plant and contacting an unexpectedly live wire with his right hand. His right arm is charred at the fingertips and the entire arm is severely swollen and erythematous. There is a 20 cm x 30 cm area of burn on his left flank where he came in contact with a metal door. Other than those areas he seems to be uninjured and is conversing with emergency room personnel.

b. The second patient is a 28 year old man who was exposed to the explosion flash. He has blistering of his posterior trunk above the belt line and the posterior aspect of one arm. The total surface area is estimated at 12% to 15% of his body surface area.

c. The third patient is a 45 year old man. He is diabetic and has flash burns producing
blistering erythema of approximately 10% of his body surface. However, his face and neck (approximately 5%) have a brown, waxen appearance and are insensitive to pin prick.

d. The fourth patient has blistering and erythema of parts of both arms (about 15% total) and an area of about 50% of the anterior chest which appears to be leathery, insensitive, and thrombosed vessels are apparent.

Study Questions:
Which of these patients may be treated appropriately as an outpatient?
Which of these patients may be treated appropriately in your own hospital?
Which of these patients should be referred to the burn centre?
What therapeutic steps will you take before transferring any patient to the burn centre?

Metabolic Response to Injury

Wound Healing and Surgical Infections

1. A 55 year old man who is steroid dependent, asthmatic, and diabetic underwent a sigmoid resection and end sigmoid colostomy for perforated sigmoid diverticulitis. There was gross contamination of the entire abdominal cavity with large intestine contents. During the operation his blood pressure fell to 80 systolic. After irrigation of the abdomen to clear debris, the abdominal fascia was closed with running #2 nylon suture material and the skin and subcutaneous tissue left open and packed with saline-moistened gauze.
Study Questions:
What type of wound closure was used in this patient?
What will be the sequence of wound healing events in this patient compared to the patient who had the skin closed?
Which factors about this patient's illness and illnesses will influence wound healing?
On day seven after surgery, this man accumulated a large amount of serosanguinous fluid in the base of the wound.
What is the most likely cause of this fluid?
What are the management options for this condition?

2. A 55 year old woman undergoes an emergency cholecystectomy and common duct exploration for acute cholecystitis and cholangitis. E. coli, Klebsiella, and enterococcus grow out of the intraoperative bile cultures. She receives ampicillin and gentamicin preoperatively and this is continued in the postoperative period through day four. On day five she complains of increased pain in the stapled skin closure site. She has an increase in temperature from 38C to 39C, and erythema and warmth are noted in the mid portion of the wound.

Study Questions:
How do you classify surgical wounds in relation to surgical infections?

What type of wound was present in this case?
What is the relative risk of wound infection in these categories?
How do you make a definitive diagnosis of wound infection in this patient?
What other risk factors can contribute to increased infection rates?
What organism(s) would you expect to culture from this wound?
How would you treat a wound infection?

3. A 65 year old male diabetic has had pain in the perianal region for three days. This morning his wife found him unresponsive and called an ambulance. Upon arrival to the emergency room he has a blood pressure of 90/50, pulse of 130, a temperature of 40C and is foul-smelling. Examination of his perianal region reveals crepitus, bullae, and foul-smelling liquid draining from a spontaneously draining abscess just lateral to the right anal opening. A pelvic x-ray demonstrates air in the soft tissues of the perineum.

Study Questions:
What types of infections can cause crepitus and air in the soft tissues?
What type of patients are more prone to these infections?
How is a specific microbiologic diagnosis made quickly?
What is the major mode of therapy for such infections?
What adjuncts are available in the management of such infections?

4. A 35 year old woman who was involved in a motor vehicle accident undergoes a splenectomy for a severely injured spleen. On postoperative day one she has a temperature to 38.5C, with physical exam demonstrating decreased breath sounds and increased vocal resonance at her left base. Preoperatively administered cefuroxime is discontinued after two doses. Her temperature over the next four days never goes below 38C and on day five increases to 39C. Her physical exam is unchanged. Her abdomen is as distended as it was immediately postoperatively, and she has passed little flatus. Her wound looks normal. She has little appetite and still requires intravenous fluid. A urinary catheter is still in place. Her WBC fell from 15,000 immediately postoperatively to 10,000 on day three. On day five it is 18,000.

Study Questions:
What are the likely causes of fever during the immediate postoperative period?
What was most likely cause in this case?
What test(s) besides physical exam would confirm this diagnosis?
What causes of fever are likely on day five?
What test(s) would help in a diagnosis?

5. A 68 year old man with known COPD (FEV1 1.5 liters, pCO2 48 on room air) undergoes an uneventful resection of a 6cm abdominal aortic aneurysm. However, intubation was difficult and required three attempts. One dose of preoperative cefuroxime was given. Central vascular access wad placed during surgery but a pulmonary artery catheter was not used. On postoperative day one he fails extubation because of vocal cord swelling and is urgently reintubated. Despite the presence of a nasogastric tube, some gastric contents are suctioned from the endotracheal tube.
He had been on H2 blockers since surgery. His repeat chest x-ray shows bilateral pulmonary infiltrates. Blood gases on 50% FIO2, tidal volume 1000 and rate 12 are pO2 95 and pCO2 42. No antibiotics are given. Four days later he develops a temperature to 39C with no drop in blood pressure but an increase in pulse to 120. His chest x-ray shows resolution of most of the infiltrates except for those in the right lower lung field. The central venous catheter is still in place. Urine output measured throughout with a bladder catheter is 30 mls to 40 mls per hour. His blood gases drawn through the arterial line placed in the operating room on 40% FIO2 are pO2 of 105, pCO2 45.

Study Questions:
What are the most likely cause of fever in this patient on postoperative day five?
What role do preoperative antibiotics have in preventing infections postoperatively? Which types of infections are prevented?
How does gastric acid neutralization affect postoperative infection risk?
What is the most common nosocomial infection?

Sterilisation

Skin and Soft Tissue Swellings

1. A 72 year old man presents with a firm mass measuring 4 cm, located approximately 3 cm superior to the gluteal crease over the sacrum. Ten years previously, he had a colon carcinoma resected and then underwent a full course of radiation therapy to his pelvis.

Study Questions:
What is the differential diagnosis of this mass?
What methods of evaluation would you employ to determine the diagnosis?
What are the therapeutic modalities available for each of the diagnoses you considered?

2. A 16 year old woman presents with a non-tender 2 cm mass in her left anterior neck. This mass had been present for several weeks and has not changed.

Study Questions:
What further information would you like to know about this patient's history?
What is your differential diagnosis of this mass?
What diagnostic study(ies) would you employ to evaluate this mass?

3. A 22 year old man with left axillary adenopathy, night sweats, and a five-pound weight loss, has had an axillary lymph node removed which revealed Hodgkin's disease.
Study Questions:
Classify the causes of lymphadenopathy.
What are the staging criteria for Hodgkin's disease and how would you stage this patient's disease?
How will you stage the disease?
What is the stage for stage treatment for Hodgkin's disease?

Nutrition

1. A 24 year old man who weighs 60 kg has a three year history of Crohn's disease. At the onset of his disease a distal small bowel resection and appendectomy were performed for perforation of the terminal ileum and abscess. Over the past two weeks he has developed fever, crampy, abdominal pain, diarrhoea and occasional vomiting. He has lost 10 pounds during this time. Physical exam reveals a pulse of 100, a temperature of 38.5C and a blood pressure of 120/70. His abdomen is distended with active bowel sounds and minimal tenderness in the right flank. His laboratory studies reveal:
Hb 13.5, Hct 40.2%, WBC 18.9, neutrophils 76 %, lymphocytes 8%, eosinophils 2%,
Albumin 2.7 gm/dl, Urea 34 mg/dl, Creatinine 1.4 mg/dl, Total Bilirubin 0.7 mg/dl,
Alkaline Phosphatase 56 IU.

Study Questions:
What features of this patient's condition are consistent with malnutrition?
How is the type and degree of malnutrition determined?
What effect, if any, does malnutrition have on the risk/benefit ratio of medical and surgical therapy for intestinal disease?
Assuming that his ideal body weight is 70 kg, what are his daily requirements in an unstressed state for fats, protein, and carbohydrate?
What are the options for nutritional support of this patient?

2. A 68 year old man underwent an elective sigmoid resection for carcinoma seven days ago. On day six a temperature to 39C and lower abdominal pain prompted a CT scan of the abdomen which revealed a left lower quadrant abscess. The following day the abscess was drained percutaneously and 100 mls of foul smelling purulent

material was removed. His abdomen is distended with few bowel sounds. He is anorectic. He has not had anything more than clear liquids by mouth since his operation. His albumin is 2.5 gm/dl.

Study Questions:
What methods of nutritional support could be used for this patient?
What are the advantages and disadvantages of each route?
If total parenteral nutrition is used, what are the risks of central venous line placement?
What are the constituents of a typical 1,000 ml bottle of total parenteral nutrition?
What are the common metabolic complications that may occur during total parenteral alimentation?
How are they recognized and treated?

3. A 45 year old man is receiving the second of two units of packed red cells 48 hours after elective hip surgery. After 50 mls of blood has been given, he develops a temperature to 38.5C and a pulse to 110.

Study Questions:
What are the standard methods of typing and cross matching blood for transfusion? Where can errors occur?
What types of problems are associated with blood transfusions - both short term and long-term?
What is the most likely problem in the patient described above?
How are these problem differentiated?

Preoperative Assessment and Preparation

Post Operative Care and Complications (including DVT)

You are called to see 32 year old man who complains of the sudden onset of respiratory distress six days following open reduction and internal fixation of a right femoral and bilateral tibial fractures sustained in an auto accident. On examination the patient is cyanotic, dyspneic, tachypneic, and hypotensive with a BP of 90/60.

Study Questions:
What is your differential diagnosis of this acute episode?
How would you establish the diagnosis?
What would be your initial treatment?
Could this acute problem have been prevented? How?
What is the long-term management of this condition?
Are there any long-term sequelae of this condition? If so, how can they be prevented and/or treated?

Ulcers, Sinuses and Fistulas

Varicose Veins
A 32 year old female presents with bilateral varicose veins, left worse than the right. She complains of aching and swelling in both the legs.

What are the important points in history? What
physical findings are you looking for? How do
you classify varicose veins?
What are the complications of varicose veins?
How will you manage this case?
A 44 year old woman presents with a swollen ulcerated left leg. She has had a moderately swollen leg for many years following a knee injury. The ulcer began with an abrasion from a minor injury six months ago, which has progressed to a large infected ulcer measuring 8 x 15 cm over the lower medial aspect of the leg. In addition to the ulcer, there are numerous varicose veins in the left leg
which is 5 cm greater in circumference compared to the right leg at both the ankle and calf level.

Study Questions:
List the possible causes of chronic unilateral leg edema and discuss the pathophysiology of this condition.
List the differential diagnoses of leg ulceration. What is the probable cause in this case?

Differentiate between primary and secondary varicose veins. What is the treatment for each?
What is your recommended management for this particular patient?

Acute Limb Ischaemia

A 64 year old woman presents in emergency with a one-hour history of severe left leg pain and numbness. Examination shows a pale, cool leg without palpable pulses. The right leg is normal with palpable pulses.

Study Questions:
What are the possible causes of acute leg ischemia?
How would you establish the correct diagnosis? What
would be your initial treatment?
Discuss the alternatives of management for each of the diagnostic possibilities you have considered.

A 50 year old lady suffers from myocardial infarction. She is admitted to Coronary Care Unit. Next morning she complains of severe pain of sudden onset in the right leg. On examination she has got good femoral pulse but no pulsation in the popliteal. The right foot is pale and no recordable ankle pressure.

Study Questions:
Elaborate what has happened to this patient?
What are the causes of acute ischaemia in the leg?
How are you going to manage this case?

Chronic Limb Ischaemia

A 44 year old librarian is referred to you for a chronic ulcer over his right lateral malleolus. He is an obese, non insulin-dependent diabetic who smokes 1.5 packs of cigarettes per day. The ulcer has been present for six months and is painful, especially at night. He has a two year history of progressive calf, thigh and buttock claudication to the point that he can now walk only 200 yards before having to stop and rest.
Physical examination reveals an obese male in no distress. BP 180/100 in both arms. A left carotid and bilateral femoral bruits are noted. No peripheral pulses are palpable in the lower extremities below weak femorals. A 1.5 cm ulcer is present over the later malleolus of the right ankle.

Study Questions:
List your preliminary diagnoses.
What are your initial recommendations?
What further diagnostic studies are indicated?
What is the cause of his malleolar ulcer?
What treatment would you recommend if further studies revealed: a) myocardial insufficiency, b) a tight left carotid stenosis, c) severe aorto-iliac omlslusive disease with a 50% stenosis of the right renal artery, and d) diffuse femoral popliteal tibialomlslusive disease without compete occlusion.
Discuss the initial and long-term management of his primary complaint.
What is the long-term prognosis for this patient?
Can it be influenced by appropriate treatment?
A 72 year old presents with pain in the right leg on walking up to 300 yards. The pain settles down on rest. He is hypertensive and also suffers from ischaemic heart disease. He has been smoking 20 cigarettes a day for the last 40 years.

What are the important points in this patient's history?
What further question would you like to ask?
What are the likely physical findings in this patient?
What investigations will you carry out?
How are you going to manage this patient?

A 60 year old insulin dependent diabetic presents with a painful ulcer on the tip of right second toe. The pain is excruciating, especially at night. It is relieved by hanging the foot outside the bed. On examination her BP is 160/100 mmHg, Pulse 83/minute. Right femoral pulse is absent and there is no popliteal pulse as well. Her ankle brachial pressure index is 0.25.

What is your differential diagnosis of ulcer in the foot?
What are the risk factors associated with peripheral arterial disease?
What are the different types of ischaemia?
What is ankle brachial pressure index?
What are the complications of peripheral arterial disease?
How are you going to manage this patient?

Acute Abdomen

1. Patient A: A 44 year old woman comes to the emergency room with a complaint of upper abdominal pain of four hours duration. The pain came on 30 minutes after eating a hamburger and french fries. She vomited once at the beginning of the pain and at present still has nausea. The pain has been gradually getting worse, yet has periods when it seems to subside, but not disappear. She points to the entire upper abdomen to describe the location of the pain. The region of her right shoulder blade hurts. She cannot seem to find a comfortable position and is continuously moving.

2. Patient B: A 50 year old male was drinking alcohol this morning when he developed upper abdominal pain. He vomited the alcohol and could not drink anything further. The pain increased steadily with no periods of relief. The pain is most severe in one spot, high in the epigastrium. The pain travels through to his back and he feels better when sitting up and leaning forward. Otherwise, he does not want to move.

Study Questions:
What patterns of pain differentiate visceral from somatic abdominal pain?
Which do these patients exhibit?
What innervation is responsible for transmitting visceral and somatic abdominal pain?
Which type of pain is characteristic of peritonitis?
How are you going to investigate either patient?
List the treatment options in both cases?
3. A 70 year old man with a complaint of left lower quadrant pain exhibits the following
physical examination: Blood pressure 120/80, pulse 100, temperature 38.5o, respirations 16. He is lying still with his left leg flexed at the hip. He is silent. Inspection of the abdomen reveals lower abdominal distension with no masses and no scars. Auscultation reveals diminished bowel sounds. Percussion is tender in the left lower quadrant. Palpation demonstrates involuntary guarding in the left lower quadrant. Palpation in the right lower quadrant produces discomfort in the left lower quadrant. Rectal exam is tender on the left.

4. A 55 year old woman who complains of abdominal pain and vomiting exhibits the
following physical examination: blood pressure is 120/70, pulse is 90, temperature 37C, respiratory rate is 12. She sits up, then lays down, then moves on one side, then the other. She periodically moans with increased pain, then seems relieved. Inspection reveals diffuse abdominal distension with a scar in her lower midline. Auscultation reveals hyperactive bowel sounds. Percussion demonstrates prominent tympanitic sounds throughout with no tenderness. Palpation reveals diffuse voluntary guarding. Rectal exam is non-tender; it is empty.
Study Questions:
What are the physical findings which differentiate visceral from somatic abdominal pain?
Which do these patients exhibit?
What diagnostic evaluation would you use to differentiate between the possibilities?
List the steps of management.

5. A 55 year old man who is in general good health arrives by ambulance with a complaint of severe, progressing abdominal pain which came on suddenly three hours earlier. His blood pressure is 90/50, pulse 130, temperature 38C,

respirations 16. His physical examination reveals abdominal distension, no bowel sounds, and involuntary guarding throughout, a "board-like abdomen." An upright chest x-ray reveals free air under the diaphragm.

Study Question:
What is your differential diagnosis?
What are the management priorities for this patient?
What treatment option you may have if this is an 80 year old with COPD?

6. A 64 year old man presents to the emergency room complaining of having passed a cup of blood per rectum into the toilet. He has had no pain, but was frightened by the blood. He denies previous bleeding but has a history of haemorrhoids. His medical history is significant for stable angina for which he takes an occasional nitroglycerin and chronic obstructive lung disease for which he uses an inhaler.

Study Questions:
What are haematochezia, malena, and haemetest positive stools and what is the significance of each?
What does this patient have?
What is the differential diagnosis for this patient?
What is most likely cause?
What is your plan of action? Be specific about the order in which you will proceed.
What would be the indications for operative intervention in this man's case?

7. A 45 year old woman presents with her first episode of haematemesis about forty miles from Islamabad. She is noted to have a blood pressure of 80/40 and a pulse of 120. After initial resuscitation, nasogastric tube drainage continues to demonstrate active bleeding. She is transferred because of the acuteness and severity of her illness. Upon arrival to emergency room, her blood pressure and pulse are still 80/40 and 120, respectively, despite the administration of two units of packed cells during transfer.

Study Questions:
What are the management priorities for this patient?
What questions would you ask this patient?
What physical examination findings would you search for?
What is the differential diagnosis?
What diagnostic investigations would you order?
What are the therapeutic options for each common cause of major upper intestinal haemorrhage?
What are the indications for surgical intervention for each of these causes?

<u>Hernias and Scrotal Swellings</u>

1. A 25 year old man presents to your office with a complaint of an intermittent bulge in his right groin, which occurs with heavy lifting, but which goes back in easily.

Study Questions:
What predisposing medical conditions will you inquire about in the patient's history?
On physical examination, cough reflex is present and is easily controlled by pressing in the deep inguinal ring. Based on physical examination and the patient's age and sex, what is the likely type of hernia: indirect, direct or femoral?

2. At the time of surgery the patient is noted to have a bulge through a weakness in Hesselbach's triangle.
Define Hasselback's triangle. Is this a direct or indirect hernia?
Compare and contrast the anatomic and developmental differences between direct and indirect hernias.
What are your operative options for repair of this hernia defect?
What are the possible post operative complications?

3. An 80 year old woman presents to the emergency room with a three-day history of intermittent abdominal distension and vomiting. On physical exam she appears slightly dehydrated. Her abdomen is distended and tympanitic

to percussion but without evidence of peritonitis. A bulge is noted in the right groin, slightly inferior to the inguinal ligament.

Study Questions:
What is your diagnosis?
What is the preoperative workup and preparation needed for this patient?
What other complications of hernias are possible?

4. Surgery is performed on a 72 year old for a perforated duodenal ulcer with a history of steroid-dependent chronic obstructive pulmonary disease. Postoperatively, he develops an infection of his upper midline abdominal incision. After the wound is fully healed, the patient presents back with complaint of a bulge in the incision, with straining.

Study Questions:
What risk factors contributed to the development of this incisional hernia?
What other risk factors exist for development of incisional hernias?
What are the indications for repair of the incisional hernia? How can you minimize risk factors for recurrence after the repair?

5. A woman brings her two month old infant to your office with complaint of a umbilical hernia. The child is otherwise healthy. On physical examination you find a 1 x 1 cm bulge at the umbilicus. This is easily reducible and you palpate a fascial defect the size of your small finger.

Study Questions:
What treatment is indicated?
How would the cause, history, and treatment differ if this were an adult?

6. A 20 year old labourer presents with a history of acute onset of pain in the right groin after lifting a heavy weight. Soon after he noticed a small swelling in the same area.

What do you thing the patient has developed?
Classify inguinal hernias.
Is this a direct or indirect hernia?
How will you confirm what type of hernia is this?
What are the management options?
7. A newborn has been noticed to have a swelling in the left inguinal region. It increases when the child cries.

What is the most likely diagnosis?
How is inguinal canal different in a child?
Is there a difference of management of this condition as compared to similar condition in the adults?

Trauma - Overview

Primary and Secondary Survey

1. A 25 year old is brought to casualty with history of fall from a height of 20 feet. He landed on a pile of bricks. Fortunately there was no head injury. He is complaining of severe abdominal pain. On examination he is conscious; his pulse is 110 / minute, BP 90 / 60 mm Hg. There is no external wound. However has abrasions in the left upper quadrant and left lower chest.

What are the principals of management of acute trauma?
How are you going to assess this patient?
What will be your priority in the management of this patient?
Why is this patient haemodynamically unstable?
How are you going to stabilise this patient?
What do you mean by ‘trauma series’?

A 19 year old man is brought into the emergency department following a motorcycle accident in which he was thrown 20 feet. Vital signs on admission to the emergency room are blood pressure 90/60, pulse 140, respirations 24 and noisy. He is unconscious, has a bruise over his forehead, there is fresh blood flowing from a laceration in his right groin, and his left leg is twisted in a deformed angle.

Study Questions:
What is the priority of steps for the initial evaluation and resuscitation of this patient?
What are the methods of securing control of the airway, particularly with facial and head trauma?
Which type of intravenous fluid should be administered initially in this patient and in what quantities?
What would be the indications for giving blood transfusions?
What type of shock could be present?
How are the different types differentiated?
Which is most likely?

Abdominal Trauma

A 24 year old man is in the operating room for a massive liver injury sustained when his motorcycle hit a truck. After one hour of surgery he has received 15 units of packed cells and has developed diffuse oozing from the surface of his liver. Clots are no longer forming. His body temperature is 34oC.

Study Questions:
What are the common aspects of management of trauma?
What are the most common coagulation difficulties associated with massive transfusion?
What is the management of each?
What do you understand by damage limiting surgery?

A 22 year old man was driving drunk and without his seatbelt fastened when he was involved in a single-vehicle automobile accident. No information was available about the time of the accident. He was found agitated and complaining of abdominal pain. His airway was patent. At the scene, he was breathing at 20 per minute with a blood pressure of 90/60 and a pulse of 130. He was placed in a hard cervical collar and on a back board and transported to your emergency room. Upon arrival his vital signs are the same, with a temperature of 36C. His abdomen is markedly distended. His hands and feet are cold, his legs mottled. A nasogastric tube reveals green liquid. A urinary catheter reveals dark yellow urine. His haemoglobin is 7. His abdominal lavage reveals gross blood.

Study Questions:
What type of shock does this patient exhibit?
What alterations in oxygen delivery are present?
What acid/base category would be expected?
What is the effect of this kind of shock on the kidneys, the heart, the lungs, the brain, the intestine?
What would be the cardiac output?
What would be the systematic resistance?
What would be the central venous and/or pulmonary capillary occlusion pressure?
What therapy would reverse the shock?

A 45 year old woman who was wearing a lap seat belt is involved in a head-on automobile collision. She is awake and complains of abdominal pain. She is slightly pale and has a blood pressure of 110/80. There is a bruise across her upper abdomen, with slight guarding and moderate tenderness to palpation.

Study Questions:
What is your suspicion in this case?
What diagnostic tests that would be most often used to assess this patient for
significant intra-abdominal injury?
How are you going to manage this patient?

Chest Trauma

A 26 year old man sustained a stab wound to the left chest just below the mid-clavicle. His blood pressure is 70/50. He is cyanotic. His neck veins are markedly distended, and there is minimal external bleeding.

Study Questions:
What life-threatening injuries might account for this patient's condition?
How should each of these possible injuries be managed emergently? How are you going to resuscitate the patient?
How would you insert a chest drain?
What are the indications of surgical intervention?

Head Injury

A 22 year old while wheeling in F6 Markaz, fell off his bike and hit the head on the pavement. When brought to casualty he is not opening his eyes, incomprehensible sounds and flexing his upper arm to painful stimulus. There is no other injury.

What is this patient's Glasgow Coma Scale?
How will you define head injury on the basis of GCS?
What immediate management are you going to undertake in this patient?
What investigations you may ask for?
What different types of head injuries this patient can have?
Tell me the clinical features of different type of head injuries.

A 16 year old boy falls from a tree and lands on his head. He is found unconscious at the scene with vital signs of blood pressure 120/80, pulse 90, and spontaneous respirations at 16. In the emergency room his vital signs are the same, but he is mumbling incoherently and there is an enlarging hematoma on his forehead. He does not respond to verbal stimuli. He opens his eyes to painful stimuli and has a flexion response in both upper extremities. There are no other apparent injuries on physical examination, and there are no focal neurological signs.

Study Questions:
Describe how one would protect the cervical spine during the performance of resuscitation. How would one rule out a cervical spine injury?
What is the Glasgow Coma Scale? What is this patient's score?
How would one maximize perfusion of the brain and minimize cerebral edema during the initial assessment and stabilization of this patient? How can one best assess this patient for intracranial injury which would require surgical intervention?

A 22 year old man was riding a motorcycle without a helmet, when he was involved in a crash at 55 mph. He was found unconscious but breathing spontaneously with a blood pressure of 110/70 and pulse of 100. Twenty minutes later in the emergency room, he does not open his eyes to verbal or noxious stimuli, there is no verbal response and noxious stimuli result in withdrawal of both upper and lower extremities. Both pupils react to light and are normal in size.

Study Questions:
What is the Glasgow coma scale for this patient?
What physical findings would be consistent with early tentorial herniation?
What are the management priorities for this patient's head trauma?
What are the possible trauma related causes of coma in this patient?
Which is most likely?
How does coma develop?

Obstructive Jaundice

3. A 37 year old woman presents to the emergency room with a history of right upper quadrant pain, shaking chills, and jaundice. This pain came on suddenly six hours earlier and has been progressing. She took her temperature at home and it was 38C. She vomited once at the onset of the pain. She has had intermittent episodes of epigastric and right upper quadrant pain after eating for the past six months. The pain always abated after thirty to sixty minutes. Her blood pressure is 110/60, her pulse 110, and her temperature 40C in the emergency room.

Study Questions:
How is extra-hepatic obstructive jaundice differentiated from other causes?
What are the causes of obstructive jaundice?
What tests would you use to differentiate caused of obstructive jaundice?
Which cause is most likely in this case? What are the treatment priorities and management options for this case?

4. A 74 year old woman presents with a complaint of jaundice which her husband noticed two days before. She has had no specific pain but has noted postprandial epigastric discomfort which has not responded to antacids. She has lost 20 pounds over the past three months, but is on a diet.
Physical exam reveals an obviously icteric woman with a non-tender globular mass in the right upper quadrant.

Study Questions:
How is extra-hepatic obstructive jaundice differentiated from other causes?
What are the causes of obstructive jaundice?
What tests would you use to differentiate causes of obstructive jaundice?
Which cause is most likely in this case? What are the treatment priorities and management options for this case?

Intestinal obstruction

A 54 year old man is admitted to the hospital because of crampy abdominal pain and bilious vomiting that has lasted for three days. He has not had a bowel movement or flatus for two days. Ten years ago he had an appendectomy for a perforated appendicitis, with no postoperative complications. Physical examination reveals a pulse of 100, blood pressure of 110/60, temperature 37.5C. His abdomen is distended with hyperactive bowel sounds and tympanitic. There is no abdominal tenderness to palpation. His haemoglobin is 15.4, WBC 10,000.

Study Questions:
What is the most likely diagnosis and what is the likely cause for this patient's current condition?
How would your answer to question #1 be altered if this individual had never had any previous abdominal surgery?
Which abdominal signs, if present, would be ominous indications that the patient needed urgent operative treatment?
Which diagnostic laboratory tests are indicated? Which imaging study should be initially obtained to confirm your clinical diagnosis?
Discuss your immediate and subsequent management of this patient. Is more than one treatment option available?
A 65 year old man has a complaint of crampy lower abdominal pain and constipation. His physician finds occult blood in stool with no rectal mass and recommends a colonoscopy. At colonoscopy a large, friable mass partially obstructing the sigmoid colon at 35 cm is biopsied and is positive for adenocarcinoma. No other colonic lesions are noted.
Study Questions:
What other diagnostic study(ies) besides colonoscopy might have been used to make this diagnosis?
What preoperative tests would you order specific for evaluation of adenocarcinoma.
What does the Duke's classification refer to?
What are the stages of colon cancer and how do these relate to prognosis?
How might this patient's presentation be different if he had a right colon carcinoma?
How do you follow a patient postoperatively after resection of a colon cancer? What methods are currently available to detect recurrence?

A 95 year old woman is sent to the emergency room from a nursing home with complaints of abdominal pain and distension. It is unclear, but staff at nursing home thinks it has been about four days since she had a bowel movement. On examination, the woman has an expressive aphasia and a right hemiparesis from a previous stroke. Her vital signs are pulse 90, blood pressure 120/80, and she is afebrile. Her abdomen is markedly distended with hyperactive bowel sounds and tympanitic throughout. There is no abdominal tenderness. Rectal exam reveals large quantities of soft, brown stool. KUB and upright reveal marked dilated colon consistent with obstruction.

Study Questions:
What is the differential diagnosis of a large bowel obstruction?
What tests would you employ to determine a specific diagnosis?
What would you see on abdominal x-rays?
Outline your treatment plan for a patient with volvulus. How would this differ from your treatment of a patient with a colon cancer or impaction?

Lower GIT Bleeding and anorectal problems

2. A 32 year old lady presents with one week history of severe pain on defaecation. Patient has noticed very little bleeding. She is quite constipated now and is afraid of going to toilet.

What is your clinical impression on history?
What physical findings you may notice?
What is the medical management of this condition?
What is the surgical management of this condition?

3. A 50 year old man comes with recurrent history of perianal swelling. Initially it is painful and then discharges. It settles down only to present a few weeks later in a similar fashion.

What is going on with this patient?
What is your differential diagnosis?
What you may find on physical examination?
How do you classify this condition?
What are the management options?

What are the potential complications of a patient with large bowel obstruction if left untreated? 8. A 75 year old female presents with significant PR bleeding. It was fresh and about two cups full. It was not associated with defaecation. She has previously similar episode but less in amount. She also complains of pain in the left iliac fossa occasionally.

What are the causes of pain & bleeding?
What physical findings you may find on this patient?
How are you going to investigate her?
What will be your steps of management?

4. A 45 year old presents with intermittent fresh bleeding after defaecation. It is painless but quite alarming. There is no history of constipation. Bleeding is bright red in colour.

What are the causes of bleeding PR?
What is the most likely diagnosis in this case?
How do you classify this cause?
How are you going to manage the different degrees of this case?

6. A 68 year old woman with a history of a 25 pound weight loss over the past six months presents to the emergency room with a history of passing bright red blood per rectum. Her pulse is 95, her blood pressure 120/70.

Study Questions:
What are the important points would you elaborate in this patients history?
What are the likely physical findings you may find in this case?
What is the differential diagnosis?
What investigations would you undertake in this patient?
What are aspects of immediate management in this case?

Upper GIT bleeding

. A 45 year old woman presents with her first episode of haematemesis about forty miles from Islamabad. She is noted to have a blood pressure of 80/40 and a pulse of 120. After initial resuscitation, nasogastric tube drainage continues to demonstrate active bleeding. She is transferred because of the acuteness and severity of her illness. Upon arrival to emergency room, her blood pressure and pulse are still 80/40 and 120, respectively, despite the administration of two units of packed cells during transfer.

Study Questions:
What are the management priorities for this patient?
What questions would you ask this patient?
What physical examination findings would you search for?
What is the differential diagnosis?
What diagnostic investigations would you order?
What are the therapeutic options for each common cause of major upper intestinal haemorrhage?
What are the indications for surgical intervention for each of these causes?

Thyroid

1. A young woman presents with complaints of palpitations, insomnia, weight loss and irritability. She further reveals heat intolerance and increased swelling. Physical examination reveals hand tremor, a pulse of 110, and a smoothly enlarged thyroid. Her T4 level is twice normal.

Study Questions:
What is the differential diagnosis of the patient's condition?
What investigations would you order to determine the cause of the patient's problem?
What are the options in treatment for each of these diagnoses and the advantages and disadvantages for each?
What is thyroid storm? What are the clinical features? How would you treat the problem?
How would you prepare a patient with hyperthyroidism for surgery?
What are common complications of thyroid surgery?

2. A 23 year old from Azad Kashmir presents with a large goitre. She is complaining of occasional dyspnoea on lying down.

Study Questions:
What important points will you elucidate in history?
What would you look for on physical examination?
What is the differential diagnosis?
How would you investigate?
What are the treatment options?

3. A 25 year old asymptomatic woman on routine physical examination is referred to a surgeon with a firm 1 cm nodule in the lower neck just to the right of the midline. It was nontender and moved up and down with swallowing.

Study Questions:
What is important in the history of patients with a neck mass as described above?

What investigations would you carry out to determine the nature of this nodule? If
a biopsy reveals amyloid in the thyroid, what is your diagnosis?
What are the genetic implications of this diagnosis?
What further investigations would you order?
What is the treatment of this condition and its prognosis?

Breast

1. A 40 year old woman with no family history of breast disease comes to your office with a complaint of a left breast mass of one month duration. She has regular periods, and no change in the mass was noted through one menstrual cycle. The mass is located in the upper outer quadrant of the left breast. It is smooth, non-tender with no skin retraction, no fixation to the chest wall, and there is no axillary lymphadenopathy.

Study Questions:
What is the differential diagnosis for this mass? What is the most likely diagnosis?
What is the most likely diagnosis in a 20 year old woman? In a 65 year old?
What are risk factors for development of benign breast disease?
What are risk factors for development of malignant breast disease?
What diagnostic tests besides physical exam would you consider to help evaluate this mass?

3. A 48 year old woman with irregular menses has noted a painful mass in the upper outer quadrant of the right breast which is particularly painful during her periods. On physical exam there is a tender 3-cm mass which is not fixed to the chest wall.

Study Question:
What is the likely diagnosis?
How are you going to approach this lesion?
What is the recommended management of this mass?

5. A 50 year old woman with a breast mass of undetermined duration is brought to your office because of a foul-smelling growth in the left breast. Examination reveals a necrotic 6-cm mass in the left breast with a foul-smelling exudate. The mass is fixed to the chest wall and is an obvious malignancy. The left axilla contains a 3 to 4 cm mass of matted lymph nodes.

Study Questions:
What is the clinical stage of this disease?
What is the risk of distant disease?
What would be your evaluation for distant disease?
If there is no evidence of distant disease what would be your treatment recommendation?
If there is evidence of distant disease what would be your treatment recommendation

TIME TABLE OF FIRST WEEK OF 5TH YEAR CLERKSHIP

THEME: ACUTE ABDOMEN

Timings	8.00-9.15 am	9.15-10.15 am	10.15 am-1.00 pm			1.00-2.00 pm	2.00-3.00 pm
Days	PBL/CBL	Case Presentations	Clinicals(OPD/IPD/Presentations/OT/ER)			Student Presentation	SDL
Monday 06-01-2020	Lower urinary tract symptoms	UTI Prof Dr. Naeem	Urology Prof.DrNaeem	11:00 Am	Urology Prof.DrNaeem	Case Presentation Prof Dr. Naeem	SDL
Tuesday 07-01-2020	Trauma	Fracture Dr. Naveed Gull	Ortho Dr. Naveed Gull	T E A B R E A K	Ortho Dr. Naveed Gull	Case Presentation Dr. Naveed Gull	SDL
Wednesday 08-01-2020	Pain abdomen	Peritonitis Dr. Muhammad Alam	Prof.Dr Syed Aslam Shah		Prof.DrAslamShaah	Case Presentation Prof.Syed AslamShah/SR	SDL
Thursday 09-01-2020	DDx of acute abdomen	Abdominal wall hernias Prof. Syed Aslam Shah/SR	Prof.Dr Syed Aslam Shah		Prof.DrAslamShaah	Topic Presentation Acute Abdomen Prof.Dr Syed AslamShah/SR	SDL
Friday 10-01-2020	DDx of mass abdomen	Abdominal wall hernias Prof.Dr Syed Aslam Shah/SR	Dr. Muhammad Alam	11:30 Am	Dr.MuhammadAlam	Case Presentation Dr. Muhammad Alam(SR)	SDL
Saturday	Holiday						

LIST OF CLINICAL METHODS FOR CLERKSHIP FINAL YEAR

S No	Clinical Methods	Venue/Department	Mark (√/X)
1	Thyroid examination	OPD/IPD	
2	Examination of cervical swelling+salivaryglands+lymphadenopathy	OPD/IPD	
3	Breast examination	OPD/IPD	
4	Abdomina examination (acute & chronic)	OPD/IPD/ER	
5	Examination of hernia+Inguinoscrotal swellings	OPD/IPD	
6	Vascular examinations (arterial+venous+diabetic foot)	OPD/IPD	
7	Examination of ulcers and swellings	OPD/IPD	
8	Hip joint examination	OPD/IPD	
9	Knee joint examination	OPD/IPD	
10	Examination of back	OPD/IPD	
11	Shoulder joint examination	OPD/IPD	
12	Cervical spine examination	OPD/IPD	
13	Peripheral nerves of upper limb	OPD/IPD	
14	Peripheral nerves of lower limb	OPD/IPD	
15	Cereberal examinations	OPD/IPD	

PROCEDURAL SKILLS SCIL LAB CHECKLIST

Checklist	Mark (√/X)
Application of antiseptic and aseptic techniques (Sterilization, skin preparation)	
Skin suturing, removal of stitches	
Dressing of wound	
Application of Bandages	
DRE (Digital rectal examination)	
Peripheral venous line insertion	
N/G tube Insertion	
Writing a request for histopathology / microbiology / plain and contrast Radiology /CT scan/ MRI / Ultrasongraphy	

A: Clinical Assessment			
#	Activities	MAX Scores %	Score
1	OSCE	70	
2	Clinical Encounters	5	
3	Case Discussions	5	
4	Clinical skills	10	
5	Mini-CEX	10	
TOTAL		100	

Clerkship Director_____

B: Theory Assessment			
#	Activities	MAX Scores	Scores
1	MCQs	60	
2	SAQs	40	
TOTAL		100	

Mini-CEX

Mini-CEX information: Encircle whichever is applicable										
Diagnosis:					Case setting: OPD IPD ER			Patient: New Follow-up		
Case complexity: Low Moderate High					Assessor Position/Rank:					
Focus of Mini-CEX: History & Physical examination Diagnosis Management Counseling										
Mini-CEX Scoring: encircle against N/A if not observed or applicable										
Medical Interview	N/A	1	2	3	4	5	6	7	8	9
Physical examination	N/A	1	2	3	4	5	6	7	8	9
Professionalism	N/A	1	2	3	4	5	6	7	8	9
Clinical Judgment	N/A	1	2	3	4	5	6	7	8	9
Counseling& communication Skill	N/A	1	2	3	4	5	6	7	8	9
Overall Rating	1	2	3	4	5	6	7	8	9	10
ssessor's Comments on Students performance										
Anything Especially Good					Suggestions For Development					
Agreed Actions (To be written by student):										
Student Satisfaction	1	2	3	4	5	6	7	8	9	Time for observatin:
ssessor's Satisfaction	1	2	3	4	5	6	7	8	9	Time for feedback:

Assessor Name: Assessor Signature:

PAEDIATRICS

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Introduction

Clerkship is full time clinical attachment of final year undergraduate student for eight weeks

Attendance

Clerkship will start 8:00 am. Attendance will be taken separately for each segment of activities. In case of any segment of activities will be missed, full day absent will be considered.

8 weeks training of pediatrics of Final Year MBBS students has been divided into 2 parts

a. 1st rotation consists of 4 weeks
b. 2nd rotation consists of 4 weeks.

1. This training consists of daily
    a. Topic discussions/ presentations
    b. Case discussions
    c. Clinical encounters/ hands on experience. Details are shown in table 1.
2. Topic discussions and case discussion are attended by whole group in tutorial room.
    Topics for discussion are shown in table 2.
3. For best hands on experience and clinical encounters each group of students is further divided into major groups (Batch 1 & Batch 2). These groups rotate through ward rounds, OPD, NICU, Paeds ICU/Emergency, and Paeds IPD. Details are shown in table 1.
4. At the end of 1st rotation, assessment is done by Mini CEX.Details are shown in log book (Clinical Evaluation Exercise)

    At the end of 2nd week each student will appear in an intermediate assessment, which is meant to high light the deficiencies of each student separately and guide for further improvement. This assessment has the weightage in final assessment score.
5. Clinical Portfolio
    Log book is meant for the evidence for your whole clerkship rotation. It has weightage in your final assessment scores. You need to maintain it throughout your rotation on daily bases.
6. At the end of 2nd rotation, final assessment is done through written and clinical exam.
    Details of assessment strategies are shown in table 3.
7. Details of table of specification (TOS) are shown in table 4.
8. Details of recommended books and websites are shown in table 5.

Table 1: Overview of Pediatric Rotation

Time Slot	Group	Activity	Faculty In charge	Location
8:00 am -9:00am		Hands On	Senior Registrar	Ward
9:00 am -10:00am	Full Batch	Lecture	According to Roster (Professor, AP, SR)	Tutorial Room
10:00 am-11:00am		Morning Ward Round		
11:00 am -12:30 pm	Full Batch	Long case /Short case	According to Roster (Professor, AP, SR)	Tutorial Room
12:30pm--1:00pm	Lunch and Prayer Break			
1:00 pm-2:00pm	2 Batches	Batch 1---Emergency /OPD Batch 2—IPD /NICU	OPD /Emergency SR IPD &NICU SR	OPD & Emergency IPD & NICU
2:00pm -3:00 pm (Friday 2 pm -3pm)	Full Batch	Lecture	Professor/AP/SR	Tutorial Room

First 2 weeks: Batch 1 will go to OPD and Emergency and Batch 2 will go to Paeds IPD &NICU
After 2 weeks:Batch 1 and 2 will switch over to other location.

Table 2: Topics for Discussion

Week #	Theme/ Topic	Major Disease Entities in theme	Hours
1	History and Examination Nutrition, Growth & Development.	History taking and GPE, Systemic Examinations ,Breast feeding, Weaning, Malnutrition, Growth charts plotting and Anthropometry, Developmental Milestones, Rickets.	1st Week (30 Hours)
2	Respiratory disorders, Gastrointestinal & liver disorders	Pneumonia Bronchiolitis Croup Epiglottitis Tuberculosis Asthma Acute and chronic Diarrhea/Celiac disease, Acute Hepatitis, Chronic liver disease, Worm infestation, Constipation, Abdominal Pain	2nd Week (30 Hours)
3	EPI, IMNCI, Infections	Vaccination Schedule, IMNCI, Measles, Mumps, Rubella, Chicken pox, DPT, Malaria/Dengue Fever, Enteric fever &Mini-CEX	3rd Week (30 Hours)
4	Hematologic, Neoplastic, Cardiovascular disorders	Anemia, Thalassemia, Leukemia/Lymphoma , ITP, vWD, Hemophilia VSD, PDA, ASD, TOF, CCF, Rheumatic fever, Infective endocarditis,	4th Week (30 Hours)
5	Neurologic disorders	Meningitis, Encephalitis, Brain abscess ,TBM,Epilepsy, Febrile seizures, Cerebral palsy, Hydrocephalous ,Developmental Delay , Microcephaly	5th Week (30 Hours)
6	Renal/Endocrine disorders	AGN, Nephrotic syndrome, UTI, ARF, CRF, Hypothyroidism, Short stature, Diabetes mellitus,	6th Week (30 Hours)
7	Rheumatic disorders, Poisoning, Genetics, Miscellaneous /Neonatology	JIA, Septic Arthritis SLE, Poisoning, Down syndrome, Child abuse, X-rays, Procedures, Counseling Birth asphyxia & Neonatal resuscitation, Neonatal jaundice, Neonatal sepsis Prematurity with RDS & NEC Neonatal seizures Infant of diabetic mother &Haemorrhagic disease of newborn	7th Week (30 Hours)
8	Revision and Exam week	Revision /Recap Spot diagnosis Assessment	8th week (30hours)
TOTAL			240 Hours

THEMES WITH LEARNING OUTCOMES

1.1.1 THEME: HISTORY TAKING, EXAMINATION, GROWTH, NUTRITION AND DEVELOPMENT

At the end of this session student should be able to

1. Understand the content differences in obtaining a medical history on a pediatric patient compared to an adult.
2. Understand how the age of the child has an impact on obtaining an appropriate medical history.
3. Understand the appropriate wording of indirect and directed questions, and appropriate use of each type of question.
4. Develop an awareness clinical setting in which it is more appropriate to obtain a complete medical history compared to a more limited focused history.
5. Obtain an accurate and complete history of a pediatric patient in different age groups (<1 year; 1-5 years; > 5 years).

Differences of a Pediatric History Compared to an Adult History:

Content Differences

a. Birth history
b. Feeding history
c. Developmental history
d. Immunization history
e. Family history with family tree

1.1.2Theme: General Physical Examination

At the end of this theme student should be able to

Understand how the general approach to the physical examination of the child will be different compared to that of an adult patient and will vary according to the age of the patient.

Differences in Performing a Pediatric Physical Examination Compared to an adult:

General Approach

a. Gather as much data as possible by observation first
b. Position of child: parent's lap vs. exam table
c. Stay at the child's level as much as possible. Do not tower!!
d. Order of exam: least distressing to most distressing
e. Rapport with child
   i. Explain to the child's level
   ii. Distraction is a valuable tool
f. Be honest. If something is going to hurt, tell them that in a calm fashion. Don't lie or you will lose credibility.
g. Understand impact of developmental stages on child's response. For example, stranger anxiety is a normal stage of development which tends to make examining a previously cooperative child more difficult.

Complete head to toe examination. Don't start from hand

i. Is the child alert and responsiveness?
ii. Any distress---- respiratory or otherwise
iii. Obvious abnormality, pallor, cyanosis, yellow discoloration, dysmorphic features, severe malnutrition and dehydration.
iv. HEENT (Head, anterior fontanelle, Eyes, ears, nose and throat) examination.
v. Anthropometry: Weight, height, head circumference and its plotting on growth chart.
vi. Vital signs: Pulse, respiratory rate, temperature and Blood Pressure. Blood pressure should be checked with age appropriate BP cuff and plot on centile charts.
vii. Lymph node examination
viii. viii. Pedal edema.

Patient's Profile

Name:_____Age _____ Sex _____

Informant_____ D.O.A_____ M.O.A_____

Father's Name: _____ Occupation _____ __ Ph# _____

Mother's Name: _____ Occupation _____ Ph# _____

Address_____

Presenting Complaints

_____
_____
_____

History of Present Illness

_____
_____
_____

Past History:

_____
_____
_____

Birth History:

Antenatal Period _____

Perinatal Period _____

Birth Weight _____

Postnatal Period _____

Developmental History:

Gross Motor _____
_____
_____

Fine Motor _____
_____
_____

Vision _____
_____
_____

Hearing _____
_____
_____

Speech _____
_____
_____

Social _____
_____
_____

Vaccination History:
_____

Nutrition History:
_____

Family History:
_____

Personal History:
_____

Socio Economic History:
_____

Understanding of Disease:
_____

EXAMINATIONS

GENEARAL PHYSICAL EXAMINATION

GeneralCondition:_____

Vitals:

Heart/ Pulse Rate _____ Respiratory Rate_____

Blood Pressure_____ Temperature_____

Anthropometry:

Weight _____ Height _____

Head Circumference_____Mid Arm Circumference _____

Detailed General Physical Examination:

SYSTEMIC EXAMINATION

RESPIRATORY SYSTEM EXAMINATION

Inspection:

_____

Palpation:

_____

Percussion:

_____

Auscultation:

_____

ABDOMINAL EXAMINATION

Inspection:

_____

Palpation:

_____

Percussion:

_____

Auscultation:

_____

DRE:

_____

CARDIOVASCULAR SYSTEM EXAMINATION

Inspection:

_____

Palpation:

_____

Auscultation:

_____

CENTRAL NERVOUS SYSTEM EXAMINATION

Higher Mental Functions:_____

_____

Speech:_____

Cranial Nerves:_____

Motor System:

Tone:_____

Power: _____

Reflexes:

	RT	LT
Biceps	_____	_____
Triceps	_____	_____
Supinator	_____	_____
Knee	_____	_____
Ankle	_____	_____
Plantars	_____	_____
Abdominal	_____	_____
Cremasteric	_____	_____

Sensory System Cerebellum:_____

Gait: _____

Signs of meningeal irritation :

_____

PROVISIONAL DIAGNOSIS:

INVESTIGATIONS

FINAL DIAGNOSIS

1.1.3 Theme: Breast Feeding

A Primigravida mother delivered about one hour ago. Now she is asking you about feeding the baby. At the end of this theme Students should be able to:

Knowledge:

1. Describe different kinds of milk
2. Understand benefits of breast feeding for infant and mother.
3. Understand the importance of not breastfeeding, in terms of health outcomes.
4. Understand the principle of demand feeding and be able to explain its importance in relation to the establishment and maintenance of lactation.
5. Know about the common problems of breastfeeding, how these arise, and how women may be helped to overcome them.

Students should be able to demonstrate:

Skills:

1. Correct attachment positions
2. Proper techniques of good latch and what a good latch is

Social / Ethical Issues:

Importance of exclusive breastfeeding for the first six months of life and demonstrate the knowledge and skills to enable mothers to achieve this.

1.1.4 Theme: Weaning

A mother of 6-month-old baby comes to you in OPD for guidance about starting of semisolid diet to his baby. At the end of this theme

Students should be able to describe:

Knowledge:

1. Appropriate age of start of weaning
2. Weaning foods at different ages.
3. Nutritional facts for different foods Students should be able to demonstrate:

Skills:

Counsel mother how to prepare weaning Recipes

Social / Ethical Issues:

1. Impact of delayed or inadequate weaning on health of children
2. Nutritional food fads of society

1.1.5 Theme: Malnutrition

A 4-year-old boy presents to OPD with history of recurrent diarrhea for last 9 months. On examination, he is emaciated and dehydrated. He also has wide wrist, bowing of legs and chest deformity.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Malnutrition.
2. Factors that lead to malnutrition
3. Primary & Secondary malnutrition
4. Consequences of malnutrition growth development mobility and mortality.
5. Differences between marasmus and kwashiorkor
6. Treatment of malnutrition.
7. Protein energy malnutrition protocol

Students should be able to demonstrate:

Skills:

1. Preparation of diet chart for weight gain of malnourished children
2. Counseling of mothers of malnourished child.
3. Physical examination of malnourished child with emphasis on micronutrient and macronutrient deficiencies.

Social / Ethical Issues:

1. Under 5 malnutrition & sustainable development goals (SDGs) regarding malnutrition
2. Mortality rate of malnutrition
3. How to prevent malnutrition?
4. Emotional support of parents.

1.1.6 Theme: Anthropometry

Students should be able to describe:

Knowledge:

1.The normal values of weight, length and head circumference at birth and at 1 year. 2.Yearly increase in weight, height and head circumference

Students should be able to demonstrate:

Skills:

1.Plotting of height, weight and head circumference on growth chart and calculate the grade of malnutrition.

Social / Ethical Issues:

Guide the parents of child about growth status of the child

1.1.7 Theme: Development Milestones

A one-year old child is brought to your clinic for not being able to sit.

At the end of this theme

Students should be able to describe:

Knowledge:

All areas of development (motor / language / Cognition / interpersonal) Students should be able to:

Skills:

1. Obtain proper history from patient's care taker
2. Differentiate developmentally normal from developmentally delayed child.
3. Ascertains age of child in each area of development.
4. Counsel the parents regarding developmentally delayed child.

Social / Ethical Issues:

Students should

1. Be aware of problems of physically / mentally challenged child and their families.
2. Know the involvement of different subspecialties in care of developmentally delayed child
3. Know the chances of improvement and quality of life of such children.

1.1.8 Theme: Rickets

Students should be able to describe:

Knowledge:

1. Definition of rickets
2. Pathophysiology of rickets
3. Types of rickets
4. Clinical features of rickets
5. Management of ricketsStudents should be able to:

Skills:

1. Obtain history and do physical examination of child with rickets.
2. Pick signs of rickets on x-ray wrist.
3. Interpret reports of blood test of rickets

Social / Ethical Issues:

Student should know how to prevent rickets in society

Week 2

Theme Respiratory disorders , GIT and Liver disorders

2.1.1Pneumonia

A 8-month-old boy presents to OPD with a 4 days history of cough. Breathing difficulty and high-grade fever for 2 days.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Pathophysiology of pneumonia
2. Organisms that cause pneumonia at different ages
3. Common age of children of pneumonia
4. Clinical features of pneumonia
5. Investigation plan with interpretation
6. Management plan Students should be able to:

Skills:

1. Take history and do physical examination of child with pneumonia
2. Check oxygen saturation with pulse oximeter.
3. Administer oxygen with face mask and nasal cannula.
4. Guide the parents about correct dose and method of nebulization.
5. Interpret chest x-ray.
6. Interpret reports of CBC

Social / Ethical Issues:

1. Counsel the parents about disease
2. Know the strategies to prevent pneumonia in the community.

2.1.2 Theme: Bronchiolitis

A 2-year-old boy presents to OPD with a one-month history of cough and low-grade fever for 2 days.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Pathophysiology of bronchiolitis
2. Organisms that cause bronchiolitis
3. Common age of children of bronchiolitis
4. Clinical features of bronchiolitis
5. Investigation plan with interpretation
6. Management plan Students should be able to:

Skills:

1. Take history and do physical examination of child with bronchiolitis
2. To check oxygen saturation with pulse oximeter.
3. Administer oxygen with face mask or nasal cannula.
4. Guide the parents about correct dose and method of nebulization.
5. Interpret chest x-ray.
6. Interpret reports of CBC

Social / Ethical Issues:

Counsel the parents about disease.

2.1.3 Theme: Croup

A 4-year-old boy presents to OPD with a one-day history of barking cough and low grade fever for 2 days.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Pathophysiology of croup
2. Organisms that cause croup
3. Common age of children of croup
4. Clinical features of croup
5. Investigation plan with interpretation
6. Management plan Students should be able to:

Skills:

1. Take history and do physical examination of child with croup
2. Check oxygen saturation with pulse oximeter.
3. Administer oxygen with face mask or nasal cannula.
4. Guide the parents about correct dose and method of nebulization.
5. Interpret neck x-ray.
6. Interpret reports of CBC

Social / Ethical Issues:

Counsel the parents about disease.

2.1.4 Theme: Epiglottitis

A 4-year-old boy presents to OPD with one day history of barking cough, difficult breathing, high-grade fever and drooling from mouth.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Pathophysiology of epiglottitis
2. Organisms that cause epiglottitis
3. Common age of children of epiglottis
4. Clinical features of epiglottitis
5. Investigation plan with interpretation
6. Management plan Students should be able to:

Skills:

1. Take history and do physical examination of child with epiglottitis
2. Check oxygen saturation with pulse oximeter.
3. Administer oxygen with face mask or nasal cannula.
4. Interpret of neck x-ray.
5. Interpret reports of CBC

Social / Ethical Issues:

Counsel the parents about disease.

2.1.5 Theme: Tuberculosis

A 7 years old boy presents to OPD with a two-month history of cough and low-grade fever and anorexia. His grandfather coughs a lot with copious sputum which sometimes contains blood.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Pathophysiology
2. Mode of spread of TB
3. Primary and secondary TB
4. Clinical Presentation
5. Diagnosis of TB
6. Treatment plan
7. Multidrug resistance
8. Prevention
9. Prevention of MDR TB

Students should be able to:

Skills:

1. Obtain proper history from patient's and care taker
2. Perform physical examination of child with TB
3. Read and place Montoux test.

Social / Ethical:

Student should be sensitized about

1. Burden of TB in Pakistan
2. Confidentiality, ensure complete duration.

2.1.6 Theme: Asthma

An 8-year-old boy presents to OPD with a 2 days history of cough and low-grade fever. He had 5 to 6 similar episodes in the past year.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Pathophysiology of asthma
2. Common age of children of asthma
3. Clinical features of asthma
4. Allergens of disease
5. Investigation plan with interpretation
6. Treatment plan Students should be able to:

Skills:

1. Take history and do physical examination of child with asthma
2. Check peak expiratory flow rate of child and its interpretation.
3. Administer oxygen with face mask or nasal cannula.
4. Check oxygen saturation with pulse oximeter.
5. Guide the parents about correct dose and method of nebulization.
6. Guide the child and parents about correct use of inhaler with spacer device 7.Guide the child and parents about monitoring of disease with regular peak flow rate.
8. Interpret the chest x-ray.
9. Interpret reports of CBC

Social / Ethical Issues:

1.Educate parents regarding avoiding allergens, good compliance with oral medicines, inhalers and regular follow ups.

An 8-month-old boy presents to OPD with a 4 days history of loose watery stool 8 to 10 times per day associated with low grade fever.

22. GASTERINTESTINAL & LIVER DISORDERS

2.1.1 Theme: Acute Diarrhea

At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of diarrhea
2. Pathophysiology of diarrhea
3. Organisms that cause diarrhea
4. Clinical features of diarrhea
5. Classification of dehydration.
6. Investigation plan with interpretation 7.Treatment plan especially fluid management

Students should be able to:

Skills:

1. Take history and do physical examination of child with pneumonia
2. Assess dehydration accurately
3. Pass nasogastric tube
4. Pass IV cannula
5. Pass intraosseous needle
6. Interpret reports of serum electrolytes

Social / Ethical Issues:

1.Counsel the parents about disease and hygienic measures.

2.1.2 Theme: Chronic Diarrhea/ Celiac disease

A 10-month-old boy presents to OPD with a 4 month history of recurrent diarrhea with no fever or vomiting. Weaning started at 6 months of age.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of chronic diarrhea
2. Causes of chronic diarrhea
3. Clinical features of diseases that cause chronic diarrhea especially celiac disease.
4. Investigation plan with interpretation
5. Management plan Students should be able to:

Skills:

1. Take history and do physical examination of child.
2. Assess dehydration accurately.
3. Pick signs of micronutrient and macronutrient deficiencies on physical examination.
4. Plot height, weight and head circumference on growth chart
5. Classify the grade of malnutrition of child accurately.

Social / Ethical Issues:

1. Counsel the parents about disease and diet of child and regular follow ups.
2. Emphasize the screening of chronic diarrhea in other family members.

2.1.3 Theme: Acute Viral Hepatitis

A 6 years old boy presented in OPD with 3 days history of low-grade intermittent fever along with anorexia, abdominal pain and vomiting 8 to 10 episodes per day. On examination there is yellow discoloration of sclera along with tender hepatomegaly.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Mode of transmission
2. Viruses that cause acute hepatitis
3. Pathophysiology
4. Clinical features
5. Investigation plan with interpretation

6. Management plan
7. Complications
8. Prevention

Students should be able to:

Skills:

1. Take history taking from patient's care taker
2. Perform abdominal examination
3. Pick hepatosplenomegaly on physical examination.

Social / Ethical Issues:

1. Educate the family about sanitary measures
2. Emphasize about importance of vaccination for Hepatitis A and B

2.1.4 Theme: Abdominal Pain

A 6 years old boy presented in OPD with 2 days history of abdominal pain and vomiting 8 to 10 episodes per day.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Causes of abdominal pain--- surgical and non-surgical
2. Clinical features of diseases that present with abdominal pain
3. Investigation plan with interpretation
4. Management plan
5. Complications 6.Dietary advice

Students should be able to:

Skills:

4. Take history taking from patient's care taker
5. Perform abdominal examination
6. Pick hepatosplenomegaly on physical examination 7.Counsel the child and parents about disease and diet.

Social / Ethical:

Educate the family about sanitary measures

2.1.5 Theme: Constipation

A 2 years old girl presented in OPD with 6 month history of constipation with on and off abdominal pain and 1 week history of blood in stool. She takes milk 7 to 8 times daily and occasionally eat fruits and solid diet.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Causes of constipation in children
2. Clinical features
3. Investigation plan with interpretation
4. Management plan
5. Complications

Students should be able to:

Skills:

1. Take history taking from patient's care taker
2. Perform abdominal examination
3. Perform digital rectal examination
4. Counsel the parents about disease, diet and toilet training of child.

Week 3

3.1 EPI, IMNCI & INFECTIONS

3.1.1 Theme: Expanded Program of Immunization(EPI) Schedule

Students should be able to describe:

Knowledge:

1. Diseases covered by EPI
2. Ages at which vaccines are given
3. Dosage of vaccines
4. Route of vaccines
5. Adverse effects of vaccines
6. Contraindications of vaccines 7.Maintenance of cold chain of vaccines

Students should be able to:

Skills:

1. Take vaccination history from patient's care taker
2. Read vaccination card to ascertain the vaccines received by child.
3. Locate BCG scar
4. Administer intradermal vaccines
5. Administer intramuscular vaccines
6. Administer subcutaneous vaccines
7. Counsel the parents about importance of vaccines, their schedule and vaccination card.

3.1.2 Theme: Integrated Management of Childhood Illness (IMCI)

At the end of this theme

Students should be able to describe:

Knowledge:

1. Purpose of IMCI
2. Health facility focused in IMCI
3. Diseases covered in IMCI
4. Principles of IMCI case management especially color coded triage system.

Students should be able to:

Skills:

1. Take history from patient's care taker according to IMCI guidelines
2. Examine the child according to IMCI guidelines
3. Implement IMCI guidelines.

3.1.3 Theme: Measles, Chickenpox

A 5 years old boy presented in OPD with 2 days history of high-grade continuous fever along with rash on body.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Mode of transmission
2. Pathophysiology
3. Clinical features
4. Investigation plan with interpretation
5. Management plan
6. Complications
7. Prevention
8. Differential diagnosis of rash

Students should be able to:

Skills:

1. Take history from patient's care taker
2. Perform relevant clinical examination of child
3. Counsel the child and parent's regarding isolation and preventive measures in other family members

Social / Ethical Issues:

1. Emphasize community on importance of immunization in prevention of diseases.
2. Notify the measles cases to WHO.

3.1.4 Theme: Mumps

A 5 years old boy presented in OPD with 1 day history of high-grade continuous fever along with bilateral swelling at angle of mandibles with difficulty in eating.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Mode of transmission
2. Pathophysiology
3. Clinical features
4. Investigation plan with interpretation
5. Management plan
6. Complications
7. Prevention
8. Differential diagnosis of swelling

Students should be able to:

Skills:

1. Take history from patient's care taker
2. Perform relevant clinical examination of child
3. Counsel the child and parent's regarding isolation and preventive measures in other family members

Social / Ethical Issues:

1.Emphasize community on importance of immunization in prevention of diseases.

3.1.5 Theme: Malaria

A 9 years old boy presented with complain of high-grade, intermittent fever associated with rigors and chills. His examination revealed splenomegaly.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Mode of transmission of Malaria
2. Pathophysiology
3. Types of plasmodium
4. Chronic Malaria
5. Cerebral Malaria
6. Investigations plan with interpretation
7. Management plan
8. Complications
9. Prevention of Malaria
10. Differential diagnosis of a child with fever

Students should be able to:

Skills:

1. Obtain proper history from patient's care taker
2. Prepare thick and thin film
3. Diagnose malaria on peripheral smear
4. Perform abdominal examination
5. Pick splenomegaly on physical examination.

Social / Ethical Issues:

1. Ensure mosquito free environment
2. Educate the family about measures to kill mosquitos to prevent spread of malaria and dengue
3. Disseminate information about malaria prophylaxis in foreign travelers.

3.1.6 Theme: Enteric Fever

A 6 years old boy presented in OPD with 3 days history of high-grade continuous fever along with vomiting. On examination child looks toxic and spleen tip is palpable.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Mode of transmission of Enteric fever
2. Pathophysiology
3. Clinical features of enteric fever
4. Investigation plan with interpretation
5. Management plan
6. Complications
7. Prevention of Enteric fever
8. Multi Drug resistant Salmonella
9. Differential diagnosis of a child with fever

Students should be able to:

Skills:

1. Interpret report of blood culture and sensitivity
2. Perform abdominal examination
3. Perform general physical examination
4. Pick hepatosplenomegaly on physical examination
5. Identify signs of acute abdomen

Social / Ethical Issues:

1. Educate family about sanitary measures
2. Disseminate information about vaccination for Typhoid fever in community.

WEEK 4

4.1 HEMATOLOGIC, NEOPLASTIC & CARDOVASCULAR DISORDERS

4.1.1 Theme: Anemia / Thalassemia / Leukemia

A 1 year old infant presents in OPD with pallor, poor appetite and failure to thrive At the end of this theme Students should be able to describe:

Knowledge:

1. Differentiating features between Anemia, thalassemia and leukemia
2. Classification and causes of anemia (nutritional, Hemolytic, Hemoglobinopathies)
    a. Microcytic Anemia
    b. Macrocytic
    c. Normocytic
3. Investigation plan with interpretation
4. Management according to cause
5. Prognosis

Students should be able to:

Skills:

1. Obtain proper history from patient care taker with special emphasis on dietary history and also ask relevant questions in history to rule out thalassemia and leukemia.
2. Perform GPE (Pallor, Thalassemicfacies, petechia, purpura, lymphadenopathy, Jaundice, bone tenderness)
3. Perform abdominal examination and can pick up visceromegaly)
4. Calculate volume of blood to be transfused
5. Transfuse blood to patient following pre and post transfusion protocols and managing transfusion reactions if accured
6. Administer subcutaneous iron chelation therapy to patient.

4.1.2 Theme: ITP / VWB disease / Hemophilia

A 4 years old boy presents with history of epistaxis
At the end of this theme

Students should be able to describe:

Knowledge

1. Differentiating features between ITP, VWB disease & Hemophilia
2. Pathophysiology of coagulation pathway
3. Investigation plan with interpretation
4. Management according to cause
5. Prognosis

Students should be able to:

Skills

1. Obtain proper history from patient care take
2. Perform GPE (Pallor, petechia, bruises, and relevant examination)
3. Counsel the patient and parents about hemophilia, ITP & VWB

Social / Ethical Issues:

1. Educate the patients to avoid contact sports

4.1.3 Theme: Acyanotic heart diseases (VSD, ASD & PDA)

A 12-month-old baby girl presents with history of poor feeding, sweating, and respiratory distress. She has history of recurrent respiratory tract infections in the past. On examination there is no cyanosis but she is obviously malnourished. At the end of this theme

Students should be able to describe:

Knowledge:

1. Names of acyanotic congenital heart diseases
2. Pathophysiology
3. Age of presentation of different cardiac defects VSD / ASD / PDA
4. Investigation plan with interpretation
5. Complications
6. Management plan
7. Prognosis

Students should be able to:

Skills:

1. Obtain proper history from patients care taker
2. Perform GPE (Edema / Vitals / Pallor / anthropometry)
3. Perform CVS Examination & pick added heart sounds
4. Perform chest auscultation to identify basal crepitations
5. Perform abdominal examination for hepatomegaly
6. Counsel the parents

4.1.4 Theme: Cyanotic congenital heart diseases (TOF/TGA)

A 2 years old child presents in OPD with history of failure to thrive. Mother says that child plays actively for some time and then become breathless with bluish discoloration. His condition improves on assuming squatting position. At the end of this theme

Students should be able to describe:

Knowledge:

1. Names of cyanotic congenital heart diseases
    a. With increased pulmonary flow
    b. With decreased pulmonary flow
2. Pathophysiology
3. Clinical features
4. Hyper cyanotic spells /Tet spells
5. Investigation plan with interpretation
6. Management of cyanotic heart diseases and Tet spells
    a) Medical
    b) Surgical
7. Prognosis

Students should be able to:

Skills:

1) Obtain proper history from patient's care taker
2) Perform general physical examination (Vitals, cyanotic, clubbing, pedal edema)
3) Perform CVS examination
4) Auscultate the chest for creptitions
5) Perform abdominal examination for hepatomegaly
6) Counsel the parents

4.1.5 Theme: Acquired Heart Diseases {Rheumatic fever (RF)/ Infective endocarditis (IE) / Congestive cardiac failure (CCF)}

A previously healthy 8 years old boy presents with low grade fever for 3 weeks associated with night sweats, fatigue and breathing difficulty for 2-3 days

At the end of this theme

Students should be able to describe:

Knowledge:

1. History points focusing to differentiate RF, IE & CCF
2. Pathophysiology
3. Clinical features
4. Investigation plan with interpretation
5. Management plan
6. Prognosis
7. Antibiotic prophylaxis Students should be able to:

Skills:

1. Obtain proper history from patient's care taker
2. Perform GPE
3. Perform CVS examination
4. Perform abdominal exam for hepatomegaly and splenomegaly
5. Perform joint examination
6. Perform skin examination
7. Counsel the parents

WEAK 5

5.1NEUROLOGIC DISORDERS

5.1.1 Theme: Meningitis/ Encephalitis

An 8 years old boy presents in ER with 4 days history of high-grade fever associated with headache, vomiting and photophobia. He also has history of one episode of seizures this morning.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition
2. Sign & symptoms of meningitis (neonates / older child)
3. Differentiating features of meningitis and encephalitis
4. Age wise organisms involved

5. Investigation plan with interpretation
6. Management plan
7. Complications
8. Prevention
9. Prognosis

Students should be able to:

Skills:

1. Obtain proper history from patient's care taker
2. Perform lumber puncture procedure
3. Perform CNS examination including cranial nerve examination
4. Pick signs of meningeal irritation on physical examination
5. Assess Glasgow coma scale of patient accurately
6. Counsel parents about complications if not treated properly and necessity of performing lumber puncture

5.1.2 Theme: Epilepsy

A 3 years old previously healthy child presents with generalized, self-limiting seizures for last 1 month.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition and different type of seizures
2. Differentiate between different type of seizures on basis of history
3. Etiology
4. Pathophysiology
5. Investigation plan with interpretation
6. Management plan
7. Prognosis

Students should be able to:

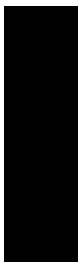
Skills:

1. Obtain proper history from patient's care taker
2. Assess Glasgow coma scale (GCS) accurately
3. Assess developmental age of patient.
4. Pick any focus of infection
5. Counsel the parents

Social / Ethical Issues:

Educate the parents regarding avoidance of over protective behavior towards epileptic child.

A 4 years old boy presents in ER with 2 day history sore throat and 1 day history of



5.1.3Theme: Febrile Seizures

Sudden onset high-grade fever with one episode of generalize tonic clonic seizure lasting for 2 minutes.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of febrile seizures
2. Age group of febrile seizures
3. Types of febrile seizures
4. Causes of febrile seizures
5. Differentiating features of simples and complex febrile seizures
6. Clinical features
7. Investigation plan with interpretation
8. Management plan
9. Complications
10. Prevention
11. Prognosis

Students should be able to:

Skills:

1. Obtain proper history from patient's care taker
2. Perform lumber puncture procedure if needed
3. Perform CNS Examination including signs of meningeal irritation.
4. Assess GCS of patient accurately
5. Counsel the parents

5.1.4 Theme: Cerebral Palsy

A 2 years old boy is brought to your clinic with inability to walk and delayed speech.
His birth history reveals delayed cry and subsequent resuscitation at birth. At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of cerebral palsy
2. Causes of cerebral palsy
3. Types of cerebral palsy
4. Investigation plan with interpretation
5. Management plan
6. Complications with their management
7. Differential Diagnosis
8. Prognosis

Students should be able to:

Skills:

1. Obtain proper history from patients care taker specially birth history
2. Assess developmental age of child.
3. Perform CNS Examination in detail
4. Counsel the parents.

Social / Ethical Issues:

Students should be able to educate the parents about

1. Home adjustment and caring environment
2. What to expect from child depending upon his developmental age and capability
3. Need of rehabilitation services
4. Challenges faced by families due to handicapped children

5.1.5 Theme: Hydrocephalous

An 8 months old child brought by her mother in OPD with history of rapidly enlarging head size since birth.At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of hydrocephalous
2. Etiology
3. Types
4. Pathophysiology
5. Investigations plan with interpretation
6. Management plan
7. Prognosis

Students should be able to:

Skills:

Obtain proper history from patient's care taker.

WEAK 6

6.1RENAL & ENDOCRINE DISORDERS

6.1.1 Theme: Acute Glomerulonephritis (AGN)/ Nephrotic Syndrome

1. Measure head circumference accurately.
2. Identify signs of hydrocephalus on examination
3. Perform detailed CNS examination 5.Assess developmental age of child.

Social / Ethical Issues:

1. Educate the society to avoid bulling of such children
2. Educate the parents regarding adjustment in family & society according to child's mental status and physical ability.

periorbital puffiness

At the end of this theme

Students should be able to describe:

Knowledge:

1. Differentiating features of AGN from nephrotic and other causes of periorbital puffiness
2. Etiology
3. Pathophysiology
4. Investigation plan with interpretation
5. Management plan

6. Complications
7. Prognosis

Students should be able to:

Skills:

1. Obtain proper history from patient's care take
2. Perform general physical examination including vitals especially BP
3. Assess extent of edema
4. Perform abdominal examination for ascites
5. Perform CVS examination for congestive cardiac failure
6. Perform respiratory system examination for pleural effusion\ fluid over load

Social / Ethical Issues:

1.Ensure complete treatment & avoid frequent changing of physicians

6.1.2 Theme: Urinary Tract Infection (UTI)

A 6 years old girl presented in OPD with 3 week history of burning micturition and 4 day history of high grade fever.

Students should be able to describe:

Knowledge:

1. Pathophysiology of UTI
2. Organisms that cause UTI
3. Risk factors of UTI
4. Clinical features of disease
5. Investigation plan with interpretation
6. Management plan Students should be able to:

Skills:

1. Take history and do physical examination of child with UTI
2. Interpret report of urine R/E and Urine C/S

Social / Ethical Issues:

3. Counsel the child and parents about hygienic measures

6.1.3 Theme: Acute Renal Failure (ARF)

A 4 years old presented in ER with 4 day history of loose watery stool 18 to 20 times per day and persistent vomiting and 1 day history of anuria.

Students should be able to describe:

Knowledge:

1. Etiology of ARF
2. Types of ARF
3. Pathophysiology
4. Clinical features of disease
5. Complications of disease
6. Prevention of ARF
7. Investigation plan with interpretation
8. Management plan Students should be able to:

Skills:

1. Take history and do physical examination of child with ARF
2. Interpret report of RFTs
3. Counsel the child and parents about disease and diet.

Social / Ethical Issues:

1. Educate the child and family about challenges.

6.1.4 Theme: Chronic Renal Failure (CRF)

A 10 year old boy presents with growth failure, headache, progressive pallor, lethargy, anorexia, facial puffiness, bone and joint pain for last one year. On laboratory investigations blood urea 70mg/dl, creatinine 7mg/dl and serum potassium level 6.5meq/l.

Students should be able to describe:

Knowledge:

1. Etiology of CRF
2. Stages of CRF
3. Pathophysiology
4. Clinical features of disease
5. Complications of disease
6. Investigation plan with interpretation
7. Management plan

Students should be able to:

Skills:

1. Take history and do physical examination of child with CRF
2. Interpret report of RFTs
3. Counsel the child and parents about disease and diet.
4. Perform peritoneal dialysis and hemodialysis

Social / Ethical Issues demonstrate:

1.Educate the child and family about challenges especially for planning for renal transplant.

6.1.5 Theme: Hypothyroidism

1. A 4 weeks old boy presents in OPD with history of constipation since birth and jaundice for last 3 weeks. On examination he has sluggish reflexes and sleep excessively
2. A 9 years old girl presents in OPD with history of cold intolerance, constipation and lethargy. On examination her weight is more than 95th centile and her height is less than 5th centile. At the end of this theme

Students should be able to describe:

Knowledge:

1. Differentiating features between congenital & acquired hypothyroidism
2. Etiology
3. Clinical Features
4. Investigation plan with interpretation
5. Management plan
6. Follow up
7. Prognosis
8. Neonatal Screening Students should be able to:

Skills:

1. Obtain proper history from patient's care take
2. Perform GPE (focusing on features suggestive of hypothyroidism)

6.1.6 Theme: Short Stature

A 14 years old boy presents with short stature. He is developmentally normal with no significant past history. His father was also short stature initially in school with delayed onset of puberty at age of 16 year and completed his growth at age of 19 years with final height of 6 feet. At the end of this theme

Students should be able to describe:

Knowledge:

1. Etiology
2. Differentiating features between different types of short stature.
3. Clinical Features
4. Investigation plan with interpretation
5. Management plan
6. Follow up
7. Prognosis

Students should be able to:

Skills:

1. Obtain proper history from patient's care take
2. Perform GPE (focusing on plotting height on growth chart with serial monitoring)

6.1.7 Theme: Diabetes Mellitus (DM)

A 10 years old girl presents with frequent urination, excessive thirst and hunger. She has rapid loss of weight with in few months

At the end of this theme

Students should be able to describe:

Knowledge:

1. Diagnostic criteria of DM (Triad of polyuria, polydipsia, weight loss along with supporting laboratory evidence)
2. Investigation plan with interpretation
3. Management plan
    a. Diet
    b. Exercise
    c. Medicine: Insulin
    d. Storing and administering of insulin
    e. Sites of administering insulin injections
4. Complications: Acute and long term
    a.Special focus on hypoglycemia & diabetic ketoacidosis

Students should be able to:

Skills:

1. Obtain proper history from patient's care taker
2. Educate the child and parents regarding different aspects of diabetes mellitus, its treatment and complications

Social / Ethical Issues:

Know importance of diet restriction

WEAK 7

7.1RHEUMATIC DISORDERS, POISONING, GENTICS, MISCELLANEOUS

7.1.1 Theme: Juvenile RheumtoidArthristis (JRA)/ Systemic Lupus Erythmatosus (SLE)

1. Educate the parents about not to be over protective
2. Ensure proper treatment and follow ups.

Swelling for last 2 months. She has slight discomfort in both eyes with restriction of her daily activities due to joint swelling.

At the end of this theme
Students should be able to describe:

Knowledge:

1. Diagnostic criteria of JRA / SLE
2. Differentiating features of JRA / SLE
3. Investigations plan with interpretation
4. Management plan
5. Prognosis of JRA / SLE Students should be able to:

Skills:

1. Obtain proper history from patient's caretaker
2. Perform general physical examination
3. Perform musculoskeletal system examination

Social / Ethical Issues:

1.Educate the family regarding environmental modification

7.1.2 Theme: Poisoning

A 2.5 year old child presented to you with accidental intake of full bottle of syrup Panadol 15 minutes ago.

At the end of this theme
Students should be able to describe:

Knowledge:

1. Common agents that cause poisoning in children e.g. Paracetamol, Ibuprofen, aspirin, tricyclic anti-depressants, caustic agents, organophosphates, Carbon monoxide and Warfarin.
2. Minimum toxic dose of each agent.
3. Clinical findings
4. Investigation plan with interpretation.

5. Management plan
6. Antidotes

Students should be able to:

Skills:

1. Obtain proper history from patient's caretaker
2. Perform general physical examination
3. Perform gastric lavage.
4. Counsel the parents regarding future prevention.

Social / Ethical Issues:

1.Student should know the magnitude of child negligence by parents in society.

7.1.3 Theme: Down Syndrome

A 38 Years mother has brought her 1-month old baby girl with concern over her specific facies, lethargy and constipation. Baby has decreased tone, up slanting palpebral fissures, low set ears, single transverse crease and increase gap between 1st and 2nd toe.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Types of chromosomal abnormality
2. Clinical features of Down syndrome
3. Recurrence risk with maternal age
4. Diagnosis of Down syndrome
5. Antenatal screening of Down syndrome
6. Management plan Students should be able to:

Skills:

1. Obtain history from patients / caretaker
2. Perform general physical examination with emphasis of features of Down syndrome
3. Do genetic counselling of parents for prevention in next pregnancies
4. Counsel the parents regarding management of this child with Down syndrome

Social / Ethical Issues:

Students should be able to educate the family about

1. Providing caring and loving environment
2. Helping child in acquiring skills according to his IQ
3. Helping him to become useful individual of society

7.1.4 Theme: Child Abuse

A 4 month old infant presents with altered mental status changes. On examination, he is sleepy and difficult to arouse. There is swelling on his right arm. X-ray shows bone fracture. Anterior fontanel is bulging. Fundoscopic examination shows retinal hemorrhages. Rest of the examination is unremarkable. At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of child abuse

2. Classification
3. Causes
4. Clinical features
5. Investigations plan with interpretation
6. Management plan Students should be able to:

Skills:

1. Obtain proper history from patient's caretaker
2. Perform general physical examination
3. Perform musculoskeletal system examination

Social / Ethical Issues demonstrate:

1. Report such cases to child protection agencies in order to prevent them in future.
2. Do psychological counseling of parents and child.

7.1.5 Theme: X-Ray Interpretation

At the end of this theme
Students should be able to interpret findings of following diseases on X-Rays.

Child

1. Pneumonia
2. Bronchiolitis
3. Tuberculosis
4. Asthma
5. Pleural effusion
6. Pneumothorax
7. Lung collapse
8. Congestive cardiac failure/cardiomegaly
9. Tetralogy of fallot
10. Transposition of great arteries
11. Dextrocardia
12. Thalassemia
13. Rickets

Neonates

1. Respiratory distress syndrome
2. Transient tachypnea of newborn
3. Meconium aspiration
4. Congenital pneumonia
5. Diaphragmatic hernia
6. Tracheoesophageal fistula
7. Duodenal atresia
8. Necrotizing entrocolitis

7.1.6 Theme: Procedures

At the end of this theme

Students should be able to demonstrate steps of following procedures.

1. Venous blood sampling
2. Arterial blood sampling
3. IV Cannulation
4. Umbilical catheter insertion
5. Intravenous injection
6. Intramuscular injection
7. Subcutaneous injection
8. Intradermal injection
9. Intravenous fluid adjustment
10. Checking BSR with glucometer
11. Blood transfusion
12. Bone marrow biopsy
13. Oxygen administration through face mask, nasal prong
14. Nebulization
15. Oral airway placement
16. Oro-nasal suction
17. Positive pressure (bag mask) ventilation
18. Endotracheal intubation
19. Nasogastric intubation
20. Lumber puncture
21. Pleural tap
22. Urinary catheterization
23. Neonatal resuscitation

7.1.7 Theme: Counseling

At the end of this theme

Students should be able to do counseling of common pediatric problems including but not limited to

1.Vaccination

2. Breast feeding
3. Weaning
4. Enteric fever
5. Pneumonia
6. Otitis media
7. Meningitis
8. Asthma
9. Cerebral palsy
10. Epilepsy
11. Hydrocephalous
12. Febrile fits
13. Celiac disease
14. Down syndrome
15. Diabetes mellitus
16. Thalassemia

17. Leukemia
18. Hemophilia
19. Iron deficiency anemia
20. Nephrotic syndrome
21. Prematurity
22. Birth asphyxia
23. Neonatal jaundice
24. Congenital heart disease (VSD, ASD)
25. Cleft palate

WEAK 8

7.2 NEONATAL DISEASES

7.2.1 Theme: Birth asphyxia

You are called to attend emergency C-Section of G4P2+2mother due fetal distress by cord around the neck at 34 weeks of gestation.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of perinatal asphyxia
2. Risk factors
3. Pathophysiology
4. Prevention of perinatal asphyxia
5. Complications
6. Stages of hypoxic ischemic encephalopathy
7. Investigation plan with interpretation
8. Management plan
9. Treatment of complications
10. Prognosis
11. Prevention of perinatal asphyxia Students should be able to:

Skills:

1. Obtain proper history from patient's care taker
2. Do detailed examination (lethargy, poor reflexes, poor tone, poor pulses and perfusion)
3. Counsel the parents about condition and prognosis of child.

7.2.2 Theme: Neonatal Resuscitation

You are called to attend emergency C- Section of G4P2+2 mother due fetal distress by cord around the neck at 34 weeks of gestation.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Preparation of resuscitation
2. Equipment required
3. Steps of resuscitation

4. Importance of APGAR score
5. Transport of baby to neonatal ICU
6. Management of neonate in neonatal ICU
7. Prevention of hypothermia Students should be able to:

Skills:

1. Demonstrate steps of resuscitation on mannequin
2. Counsel the parents about condition and prognosis of child.

7.2.3 Theme: Neonatal Sepsis

A 2 days old male child delivered at home to a primigravida mother at term with good APGAR score by traditional birth attendant. Baby developed reluctance to feed, lethargy and excessive cry for last 2 hours. There is history of premature rupture of membranes more than 24 hours before birth. At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of neonatal sepsis
2. Pathophysiology
3. Early and late onset neonatal sepsis
4. Investigation plan with interpretation
5. Management plan
6. Complications
7. Differential diagnosis
8. Prevention

Students should be able to:

Skills:

1. Obtain proper history from patient's care taker
2. Do detailed examination (lethargy, poor reflexes, poor tone, poor pulses and perfusion)

Social / Ethical Issues:

1) Do detailed parental counseling about condition and prognosis
2) Counsel the mother about regular antenatal visits in next pregnancy to avoid this in future.

7.2.4 Theme: Neonatal Jaundice

A 2 days old male child delivered at home brought to ER with history of jaundice started on 1st day of life. On examination, he is markedly jaundiced up to soles of feet.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of neonatal jaundice
2. Pathophysiology
3. Differentiating features between physiological and pathological jaundice
4. Causes of pathological jaundice especially blood group incompatibility

5. Causes of indirect and direct hyperbilirubinemia
6. Investigation plan with interpretation
7. Management plan
8. Complications
9. Prevention

Students should be able to:

Skills:

1. Obtain proper history from patient's care taker
2. Do detailed examination (lethargy, poor reflexes, poor tone, poor pulses and perfusion)
3. Administer phototherapy to baby
4. Perform exchange transfusion

Social / Ethical Issues:

1. Do detailed parental counseling about condition and prognosis
2. Counsel the mother about regular antenatal visits in next pregnancy to avoid this in future.

7.2.5 Theme: Prematurity

A 28 years old mother delivered a female child at 30 weeks of gestation due to preterm labor with APGAR scores of 7/10 and 9/10 at 1 and 5 minutes respectively. Baby developed moaning and respiratory distress immediately after birth with cyanosis

At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of prematurity
2. Causes of premature delivery
3. Complications of prematurity
4. Investigation plan with interpretation
5. Management plan
6. Preventive measures of preterm labor

Students should be able to demonstrate:

Skills:

1. Detailed history and examination
2. Neonatal resuscitation
3. Assessment of APGAR scores Social / Ethical Issues:
1. Antenatal and post-natal counselling of parents about complications of prematurity and prognosis
2. Knowledge about ventilation, surfactant administration

7.2.6 Theme: Neonatal Seizures

A 4 days old baby presents in ER with 1 day history of high grade fever & 6 hour history of recurrent seizures with cyanosis. At the end of this theme

Students should be able to describe:

Knowledge:

1. Definition of neonatal seizures
2. Types
3. Causes
4. Clinical features
5. Investigation plan with interpretation
6. Management plan
7. Complications
8. Prevention
9. Prognosis

Students should be able to:

Skills:

1. Obtain proper history from patient's care taker
2. Perform lumber puncture procedure
3. Perform CNS Examination
4. Counsel the parents

7.2.7 Theme: Infant of Diabetic Mother (IDM)

A 28 years old mother who has gestational diabetes delivered a male child at term through SVD. On examination, he is plethoric with weight of 4kg and low BSR (35mg/dl).

At the end of this theme

Students should be able to describe:

Knowledge:

1. Pathophysiology
2. Clinical features
3. Complications
4. Investigation plan with interpretation
5. Management plan

Students should be able to demonstrate:

Skills:

1. Detailed history and examination
2. Checking of BSR with glucometer

7.2.8 Theme: Hemorrhagic Disease of Newborn (Vitamin K deficiency)

A 7 day old infant born at home (so vitamin K not given) presents with bloody stools and purpura. Blood is oozing from his circumcision site. The pregnancy was without complications. He was healthy since birth.

At the end of this theme

Students should be able to describe:

Knowledge:

1. Incidence
2. Pathophysiology
3. Classification according to etiology
4. Clinical features
5. Investigations plan with interpretation

6. Management plan
7. Complications
8. Differential diagnosis

Students should be able to demonstrate:

Skills:

1.Detailed history and examination.

Students should be able to diagnose common problems on picture quiz and answer the questions given with the picture.

This picture quiz can be practiced by frequently watching the pictures in text books of pediatrics and clinical methods and attending patients in OPD, IPD, ER, PICU and NICU.

8.1 Theme: Assessment

Table 3: Assessment strategies

A: Clinical Assessment		
#	Activities	MAX Scores %
1	Histories +Attendance /Conductance	5+5=10
2	OSCE	50
3	Long Case	20
4	Short case	10 +10
TOTAL		100

Clerkship Director_____

B: Theory Assessment		
#	Activities	MAX Scores
1	MCQs	60
2	SAQs	40
TOTAL		100

Table 4: Table of Specifications of Final Year MBBS Assessment

S. No	Topic	Assessment			
		Written			Clinical (OSCE)
		MCQs %	MCQs No.	SAQs No.	
1	Nutrition/malnutrition	8	4	1	1
2	Respiratory System	10	5	1	1
3	Cardiovascular System	6	3	1	1
4	GIT and Liver	10	5	1	1
5	Renal System	6	3	1	0/1
6	Central Nervous System	10	5	1	1
7	Neonatology	10	5	1	1
8	Infections, Immunization and IMNCI	14	7	1	1
9	Growth and Development	6	3	0	1
10	Hematology and oncology	8	4	1	1
11	Endocrinology and Rheumatology	6	3	1	0/1
12	Miscellaneous (child abuse, genetics, Poisoning, metabolic disorders)	6	3	1	0/1
Total		100	50	10	10

Table 5: Books & websites recommended

#	Resource	Details
1	Basis of Paediatrics by Dr. Pervaiz Akbar	For preparations of clinical cases and theory assessment
2	Textbook of Paediatrics by Pakistan Paediatric Association	For preparations of clinical cases and theory assessment
3	Illustrated Textbook of Pediatrics by Tom Lissauer	For preparations of clinical cases and theory assessment
4	Macleod's Clinical Examination	For mastering history and clinical examination
5	Bedside Technique	For mastering history and clinical examination
6	Internet Resources: www.medscape.com, www.aap.org	For recent advances
7	www.youtube.com	For video demonstration of practical procedures and clinical methods

A: Clinical Assessment			
#	Activities	MAX Scores %	Score
1	OSCE	60	
2	Long Case	20	
3	Short case	10 +10	
TOTAL		100	

Clerkship Director_____

B: Theory Assessment			
#	Activities	MAX Scores	Scores
1	MCQs	60	
2	SAQs	40	
TOTAL		100	

Mini-CEX

Mini-CEX information: Encircle whichever is applicable										
Diagnosis:					Case setting: OPD IPD ER			Patient: New Follow-up		
Case complexity: Low Moderate High					Assessor Position/Rank:					
Focus of Mini-CEX: History & Physical examination Diagnosis Management Counseling										
Mini-CEX Scoring: encircle against N/A if not observed or applicable										
Medical Interview	N/A	1	2	3	4	5	6	7	8	9
Physical examination	N/A	1	2	3	4	5	6	7	8	9
Professionalism	N/A	1	2	3	4	5	6	7	8	9
Clinical Judgment	N/A	1	2	3	4	5	6	7	8	9
Counseling & Communication Skill	N/A	1	2	3	4	5	6	7	8	9
Overall Rating	1	2	3	4	5	6	7	8	9	10
ssessor's Comments on Students performance										
Anything Especially Good					Suggestions For Development					
Agreed Actions (To be written by student):										
Student Satisfaction	1	2	3	4	5	6	7	8	9	Time for observation
ssessor's Satisfaction	1	2	3	4	5	6	7	8	9	Time for feedback

Assessor Name: Assessor Signature:

Clinical Checklist (Mark tick each competences when gained)

<table>
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<u>General Physical Examination</u>

- Pulse ___
- Blood pressure ___
- Temperature_____
- Respiratory rate ___
- Centile Charts _____
- Anthropometry ____

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<td>

<u>General Physical Examination</u>

- Pallor___
- Jaundice____
- Examination of nails___
- Clubbing____
- Palmar erythema___
- Tremors___
- Thyroid____
- Lymph nodes___
- Edema _____

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<u>GIT examination____</u>

- Inspection____
- Palpation____
- Percussion___
- Auscultation___
- PR examination___

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<u>CVS Examination</u>

- JVP___
- Pulsusparadoxus___
- Radio radial delay___
- Radio femoral delay___
- Inspection___
- Palpation___
- Auscultation, heart sounds, added sounds___
- Murmurs ____

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<u>Respiratory Examination</u>

- Inspection___
- Palpation___
- Percussion___
- Auscultation___
- Pulse oximetry___
- Inhaler technique___
- ABGs interpretation____
- Oxygen administration through face mask, nasal prongs, head box ____
- Nebulization _____
- Oral airway placement _____
- Oro-nasal suction _____
- Positive pressure (bag mask) ventilation____
- Endotracheal intubation _____
- Mechanical Ventilation ____
- Arterial blood gases___

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<u>Musculoskeletal examination</u>

- Examination of limb joints__
- Large joint examination___
- Gait___

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<u>Procedures/Counselling</u>

- IV cannula___
- Venous blood sampling
- IM/ SC and IV injections___
- IV Fluids drops calculation ____
- Lumbar puncture___
- Pleural tap____
- Ascitic Tap
- Neonatal Resuscitation ___
- Nasogastric tube Insertion _____
- Observation of Liver Biopsy ____
- Observation of Bone marrow biopsy ____
- Checking BSR with glucometer ____
- Urinary Dipstick Checking ____
- Blood transfusion _____

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		Urinary catheterization Introduction to crash cart/ Emergency medications____ Important Poisoning ‘s ntidote___ Counselling Skills -____
<u>CNS Examination</u> <u>Cranial nerves</u> I,II ____ III, IV, VI ____ V, VII _____ VIII, IX, X ___- XI, XII _____	<u>Motor System</u> Bulk _____ Tone _____ Power _____ Superficial Reflexes _____ Deep Reflexes _____	<u>Sensory System/Cerebellum</u> Superficial/ Deep sensations _____ Touch, pain, temperature _____ Romberg sign____ Cerebellar Signs ____

GYN/OBS

Introduction to Gynaecology Clerkship

Final year clerkship program at RIHS is especially designed to improve clinical knowledge and skills of final year MBBS students.It involves learning under direct supervision and promotes patient - student contact.During these eight weeks, students will learn antenatal care, medical problems during pregnancy and postpartum conditions. They will learn management obstetrical emergencies. Students will learn Gynaecological diseases through LGIS and bedside clinical discussions. Time will be provided for SDL in between discussions. At the end of eight weeks, students will be assessed through presentation of long cases and TOACS.

Task Force

Prof. Nadra Sultana

Prof. Ambreen

Prof. Jehan Ara Alam

Dr. Taqdees Iftikhar

Dr. Mumtaz Jehan

Dr. Naila Qazi

Gynecology & Obstetric : 5th Year MBBS	
Activity	HOURS
LGIS(Large group interactive session)	40hr
SDL (Self directed learning)	40hr
SGD, WARDS, CLINICALS	160
TOTAL HOURS	240hrs

Rawal institute of health sciences
Syllabus + learning Objectives
Gynecology Department

Week 1 OBSTETRICS Activities

08:00-09:00	09:00-10:00		10:00-11:00	11:00-11:30	11:30-12:30	12:30-03:00	
Interactive Session	LGIS	learning Objectives	Self Study (in study room)		Presentation Preparation + Ward round	Presentation/ Marking	Assessment
Monday Dr. Nadra Sultana	Antenatal care Preconception counseling Obstetrical examination. Routine investigations.	Explain importance of ANC Perform preconception counseling Take appropriate Hx examination Offer relevant investigation + Mx antenatal problems	Antenatal care Preconception counseling Obstetrical examination. Routine investigations.	**BREAK**	Case presentation		MCQS WARD TEST CLASS TEST
Tuesday Dr.Taqdees	Hypertension in pregnancy . Preeclampsia. Eciampsia.	Classify hypertension disorders in pregnancy Describe clinical features evaluation and Mx of different types of HTN in pregnancy	Hypertension in pregnancy . Preeclampsia. Eciampsia.		Case presentation		MCQS WARD TEST OSPE

Wednesday Dr.JehanAra	Diabetes in pregnancy. Take and present detailed history and perform examination.	• Define pregestational + gestational Dx. • Describe clinical features and Mx.	Diabetes in pregnancy. Take and present detailed history and perform examination.		Case presentation		MCQS WARD TEST OSPE
Thursday Dr. MumtazJehan	Fetal anomalies • NTD • Fetal hydrops • Gastroschisis + omphalocele • Cardiac Anomalies	• Outline common fetal anomalies • Counsel couple with anomalous	Fetal anomalies • NTD • Fetal hydrops • Gastroschisis + omphalocele • Cardiac anomalies		Case presentation		MCQS CLASS TEST
Friday Dr.Naila	Cardiac disease in pregnancy	• What are the symptoms of cardiac disease • enumerate + describe common cardic lesions in pregnancy egM.S,AR,peripartum cardiomyopathy • Describe general Mx of cardiac Pt	Cardiac disease in pregnancy		Case presentation		MCQS WARD TEST OSPE

Syllabus + learning Objectives
Gynecology Department

Week 2 OBSTETRICS Activities

08:00-09:00	09:00-10:00		10:00-11:00	11:00-11:30	11:30-12:30	12:30-03:00	
Interactive Session	LGIS	learning Objectives	Self Study (in study room)		Presentation Preparation + Ward round	Presentation/ Marking	Assessment
Monday Dr. Nadra Sultana	Thyroid disease in pregnancy Hypothyroidism Hyperthyroidism	• Enumerate common causes of thyroid disease in pregnancy • Describe general Mx of thyroid disease in pregnancy	Thyroid disease in pregnancy Hypothyroidism Hyperthyroidism		Case presentation		MCQS CLASS TEST
Tuesday Dr.Taqdees	Pregnancy with Jaundice + Hepatitis A/E, Hepatitis B, Hepatitis C AFLP	• Enumerate common causes of jaundice in pregnancy • Describe Mx of patients with different types of jaundice + hepatitis in pregnancy	Pregnancy with Jaundice + Hepatitis A/E, Hepatitis B, Hepatitis C AFLP	**BREAK**	Case presentation		MCQS WARD TEST OSPE
Wednesday Dr.JehanAra	Evaluation +Mx of fetal death IUD. USG findings. Counselling of couple.	• Causes of IUD • CounselingOf Affected couple • Advise relevant investigation and outline Mx options	Evaluation +Mx of fetal death IUD. USG findings. Counselling of couple.		Case presentation		MCQS WARD TEST OSPE

Thursday Dr. MumtazJehan	Iron deficiency Take and present history and perform examination.	Enlist of iron deficiency of anemia Advice relevant investigations Classify anemia according to severity Outline management	Iron deficiency Take and present history and perform examination.		Case presentation		MCQS WARD TEST OSPE
Friday Dr.Naila	DVT in pregnancy, PE in pregnancy Drill	Enumerate causes of DVT Advice proper investigations Diagnosis and initial Mx of thromboembolic disease	DVT in pregnancy, PE in pregnancy Drill		Case presentation		MCQS CLASS TEST

Syllabus + learning Objectives
Gynecology Department

Week 3 OBSTETRICS Activities

08:00-09:00	09:00-10:00		10:00-11:00	11:00-11:30	11:30-12:30	12:30-03:00	
Interactive Session	LGIS	learning Objectives	Self Study (in study room)		Presentation Preparation + Ward round	Presentation/ Marking	Assessment
Monday Dr. Nadra Sultana	Thalassemia in pregnancy	Preconception counseling Describe method of prenatal diagnosis Give management	Thalassemia in pregnancy		Case presentation		MCQS CLASS TEST
Tuesday Dr.Taqdees	APH Placenta previa Placental abruption Take and present history of placenta previa.	State type of placenta previa Define placenta increta, Accreta + Percreta Risk factors of placenta previa + abnormally adhered Complication of P.P Outline Dx and Mx of Placenta previa. Outline diagnosis and management of	APH Placenta previa Placental abruption Take and present history of placenta	**BREAK**	Case presentation		MCQS WARD TEST OSPE

	Perform examination. Evaluation and management of placental abruption.	placental abruption.	previa. Perform examination. Evaluation and management of placental abruption.				
Wednesday Dr.JehanAra	Preterm Labour +PROM. Take and present history and perform examination	• Define preterm labour • Enumerate causes of preterm labour • Incidence • Initialevaluation + Risk factors of preterm labour • Define PROM • Outline workup + Mx of Patient with PROM	Preterm Labour +PROM. Take and present history and perform examination		Case presentation		MCQS WARD TEST OSPE
Thursday Dr. MumtazJehan	Twin pregnancy and multiple gestationsTake and present history and perform examination.	• State incidence + type of twins . • Dx of Multiple gestation. • Explain Complication ie twin twin transfusion syndrome. • Outline management	Twin pregnancy and multiple gestationsTake and present history and perform examination.		Case presentation		MCQS WARD TEST OSPE
Friday Dr.Naila	Maternal Collapse	• Enumerate causes of maternal collapse • Outline Mx according to cause . • List modifications of basic life support needed in pregnancy.	Maternal Collapse		Case presentation		OSPE

Syllabus + learning Objectives
Gynecology Department
Week 4 OBSTETRICS Activities

08:00-09:00	09:00-10:00		10:00-11:00	11:00-11:30	11:30-12:30	12:30-03:00	
Interactive Session	LGIS	learning Objectives	Self Study (in study room)		Presentation Preparation + Ward round	Presentation/ Marking	Assessment
Monday Dr. Nadra Sultana	Fetal monitoring CTG BPP DOPPLAR	• Describe methods of FHR monitoring • Describe components of normal CTG • Describe abnormal CTG • Describe components BPP • State importance of umbilical +MCA dopplar	Fetal monitoring CTG BPP DOPPLAR		Case presentation		MCQS WARD TEST OSPE
Tuesday Dr.Taqdees	Normal Labour IOL. Maintain partogram	• Define labour • Indications of IOL • Methods of Cx ripening • Bishop score • Describe Mx of first stage • Describe Mx of 2nd stage • Describe Mx of 3rd stage	Normal Labour IOL. Maintain partogram	**BREAK**	Case presentation		MCQS WARD TEST OSPE
Wednesday Dr.JehanAra	Perinatal Infection • Infection in early pregnancy • Infection in late pregnancy • At or around	• Enumerate important infection in pregnancy • Rubella • CMV • Toxoplasmosis • Croup B streptococcus • Varicella zoster	Perinatal Infection • Infection in early pregnancy • Infection in late pregnancy • At or around		Case presentation		OSPE

	the time delivery	Herpes zoster HIV Syphilis HCV HBVoutlineDx and Mx	the time delivery				
Thursday Dr. MumtazJehan	Partogram Primary/Secondary dysfunctional labour + Mal presentation + Mal position	Able to maintain partogram Enumerate causes of primary + secondary dysfunctional labor Dx and Mx different malpresentation + malposition Understand difference b/w normal labour + labour dystocia	Partogram Primary/Secondary dysfunctional labour + Mal presentation + Mal position		Case presentation		MCQS WARD TEST OSPE
Friday Dr.Naila	Mal position + Mal presentation (Breech , brow, Face, Shoulder)	Enumerate different malposition i.e OP, deep transverse arrest, face. Enumerate different malpositions . Dx and Mx different malpositions	Mal position + Mal presentation (Breech , brow, Face, Shoulder)		Case presentation		MCQS WARD TEST OSPE

Syllabus + learning Objectives
Gynecology Department

Week 5 OBSTETRICS Activities

08:00-09:00	09:00-10:00		10:00-11:00	11:00-11:30	11:30-12:30	12:30-03:00	
Interactive Session	LGIS	learning Objectives	Self Study (in study room)		Presentation Preparation + Ward round	Presentation/ Marking	Assessment
Monday Dr. Nadra Sultana	Complication of 3rd stage of labour PPh. Retained Placenta	• Enumerate + define complication of 3rd stage of labour PPH. • Risk factors and management. • Early Dx and outline Mx of uterine inversion ,retained placenta. • understand importance of early Mx of PPH.	Complication of 3rd stage of labour PPh. Retained Placenta		Case presentation		MCQS WARD TEST OSPE
Tuesday Dr.Taqdees	Cord prolapse Uterine rupture uterine inversion	• Outline Dx and mx of cord prolapse. • Outline Dx and Mx of uterine rupture. • Outline Dx and Mx of uterine rupture .	Cord prolapse Uterine rupture uterine inversion	BREAK	Case presentation		MCQS WARD TEST OSPE
Wednesday Dr.JehanAra	Prolong 2nd stage Assisted vaginal delivery Shoulder dystocia Forcep delivery Vacuum delivery	• Enumerate causes of 2nd stage dystocia . • Discuss indications + prerequisites for vacuum and force delivery . • Discuss pelvic land marks • Demonstrate proper methods	Prolong 2nd stage Assisted vaginal delivery Shoulder dystocia Forcep delivery Vacuum delivery		Case presentation		MCQS WARD TEST OSPE

		on mannequin .					
Thursday Dr. MumtazJehan	▯ Caesarean section ▯ Demonstration ▯ General post operative management. ▯ Management of post operative complications	▯ Enlist indications of Caesarean Section ▯ Describe common abdominal incisions for caesarean section. ▯ Give types of C/S. ▯ Give steps of C/S. ▯ Enlist complications of C/S	▯ Caesarean section ▯ Demonstration ▯ General post operative management. ▯ Management of post operative complications		Case presentation		MCQS CLASS TEST
Friday Dr.Naila	Puerperal sepsis + Puerperal problems Take and present detailed history . Perform examination.	▯ Define purperium. ▯ Care of episiotomy. ▯ Define post partumfever . ▯ Enumerate causes of post partumfever . ▯ D/D of post partum fever ▯ Dx and Mxpuerperal fever + sepsis . ▯ Give advice regarding breast feeding. ▯ Known C.I to breast feeding. ▯ Medications C.I in breast feeding . ▯ Define lactationalamenorrhoea .	Puerperal sepsis + Puerperal problems Take and present detailed history . Perform examination.		Case presentation		MCQS CLASS TEST

Syllabus + learning Objectives
Gynecology Department
Week 6 OBSTETRICS Activities

08:00-09:00	09:00-10:00		10:00-11:00	11:00-11:30	11:30-12:30	12:30-03:00	
Interactive Session	LGIS	learning Objectives	Self Study (in study room)		Presentation Preparation + Ward round	Presentation/ Marking	Assessment
Monday Dr. Nadra Sultana	AUB Take + present Hx Perform pipelle biopsy ERPC (demonstration)	Define abnormal uterine bleeding Enlist causes of AUB. Take appropriate Hx and perform examination Alvice relevant lab investigation Give medical Mx of AUB List methods of endometrial sampling Briefly describe endometrial ablation Enlist surgical option.	AUB Take + present Hx Perform pipelle biopsy ERPC (demonstration)	**BREAK**	Case presentation		MCQS WARD TEST CLASS TEST
Tuesday Dr.Taqdees	Benign tumors of uterus, (fibroid uterus) Discuss USG findings Take + present Hx	Define leiomyomas Give incidence of uterine fibroids Give types of fibroids. Give S/S of fibroids Enlist valid investigation Outline surgical + medical Mx List the types of degenerations that fibroids undergo.	Benign tumors of uterus, (fibroid uterus) Discuss USG findings Take + present Hx		Case presentation		MCQS WARD TEST CLASS TEST
Wednesday Dr.JehanAra	Chronic pelvic pain	Student can classify causes of chronic pelvic pain Obtain history and perform detailed clinical examination	Chronic pelvic pain		Case presentation		MCQS WARD TEST CLASS TEST

		Give differential diagnosis Order relevant investigations Outline management					
Thursday Dr. MumtazJehan	Lower genital tract infections	Define characteristic of normal vaginal discharge State common form of virginities Enlist distinguishing characteristics of common form of virginities State common STDS Chlamydia, syphilis Give principles of managing STDS+ common virginities	Lower genital tract infections		Case presentation		MCQS WARD TEST OSPE
Friday Dr.Naila	Upper genital tract infections. Take and present detailed history.	Define PID Enlist organisms cause PID Give D/D State population at risk of PID Prevent of PIP Advice tests recommended Outline Mx options	Upper genital tract infections. Take and present detailed history.		Case presentation		MCQS WARD TEST OSPE

Syllabus + learning Objectives
Gynecology Department

Week 7 OBSTETRICS Activities

08:00-09:00	09:00-10:00		10:00-11:00	11:00-11:30	11:30-12:30	12:30-03:00	
Interactive Session	LGIS	learning Objectives	Self Study (in study room)		Presentation Preparation + Ward round	Presentation/ Marking	Assessment
Monday Dr. Nadra Sultana	Menopause + perimenopause Counselling HRT	• Define menopause + perimenopause • Describe endocrinechanges of menopause + symptom • Briefly outline Mx of hot gulches ,menstrual ,regulasties, osteoporosis • Define HRT and know about different common properties ie.	Menopause + perimenopause Counselling HRT		Case presentation		MCQS WARD TEST OSPE
Tuesday Dr.Taqdees	Urinary incontinence	• Enumerate important causes • Define detrusor over activity • Define urodynamic stress incontinence • Outline Mx of stress incontinence • Outline Mx of defrusor over activity	Urinary incontinence	**BREAK**	Case presentation		MCQS WARD TEST OSPE
Wednesday Dr.JehanAra	Urogenital prolapse POP .Q classification. History presentation.	• Define pelvic organ prolapsed. • Define cystocele • Define rectocele • Define vault prolapse • Give incidence inquire about symptoms in Hx • Explain grading of uv prolapsed • Enlist surgical option • Give indication Mx of causative • Name cowman peseuesused	Urogenital prolapse POP .Q classification. History presentation.		Case presentation		MCQS WARD TEST OSPE

Thursday Dr. MumtazJehan	Gestational trophoblastic disease	Enlist different type of GTD What is clinical presentation of complete mole/ partial mole Outline Mx of molar pregnancy Outline follow-up of molar pregnancy Define GTT Enlist risk factors of GTT\describe Rx of GTT Define role of MTx Counsel Pt regarding next pregn	Gestational trophoblastic disease		Case presentation		MCQS WARD TEST OSPE
Friday Dr.Naila	Endometriosis + Adenomyosis	Define endometriosis + endometriosis How does endometrioses cause sub fertility Give staging of endometriosis Alvice relevant investigations Describe medical + surgical Mx of endometrioses	Endometriosis + Adenomyosis		Case presentation		MCQS WARD TEST OSPE

Syllabus + learning Objectives
Gynecology Department
Week 8 OBSTETRICS Activities

08:00-09:00	09:00-10:00		10:00-11:00	11:00-11:30	11:30-12:30	12:30-03:00	
Interactive Session	LGIS	learning Objectives	Self Study (in study room)		Presentation Preparation + Ward round	Presentation/ Marking	
Monday Dr. Nadra Sultana	Premalignant condition of cervix Take + present Hx Take pap smear Colposcapy demonstrations Cervical carcinoma Take + present detailed Hx	Describe methods of cervical screening iepapsmearinear, liquid Base cytology State importance of HPV infection Describe cellular changes seen in HPV infection Outline natural history of HPV infections + CIN lesions Define ASCUS/LSIL image study Outline criteria for colposcopy Outline management options ie LEEP, Cone,biopsy Indication of hysterectomy in CIN Differentiateb/w cervical dysplasia, carcinoma in	Premalignant condition of cervix Take + present Hx Take pap smear Colposcapy demonstrations Cervical carcinoma Take + present detailed Hx	**BREAK**	Case presentation		MCQS WARD TEST CLASS TEST

		situ, • Enlist risk factors of cervical cancer. • Explain S/S • Give incidence of cervical CA • Describe staging of cervical CA • Outline appropriateRx options according to stage of CA. State 5year survival rate.					
Tuesday Dr.Taqdees	Uterine carcinoma Take + present detailed Hx	• State incidence of endometrial CA • Enlist risk factors of endometrial CA • Give S/S • Give D/D of post menopausal bleeding • Outline workup of AUB + Post menopausal bleeding. • Describe staging of endometrial CA. • Explain route of spread • Outline Rx according to stage. Give 5 year survival rate.	Uterine carcinoma Take + present detailed Hx		Case presentation		MCQS WARD TEST CLASS TEST
Wednesday Dr.JehanAra	Ovarian carcinoma Take + present detailed Hx Perform abdominal Ex	• Give staging of ovarian cancer • Give different types of ovarian cancers • Explain staging of ovarian CA. • Which procedures are	Ovarian carcinoma Take + present detailed Hx Perform abdominal Ex		Case presentation		MCQS WARD TEST CLASS TEST

		included in staging • Describe how patients with epithelial cancer presents. • Explain role of chemotherapy • Describe surgical procedures (staging of disease) Give 5 year survival rate					
Thursday Dr. MumtazJehan	Border line + bengien ovarian tumors Take + present detailed history Perform abdominal examination	• Give D/D of adnexal masses • Enlistpoints to differentiate b/w benign + malignanttumors • Define endometriomos + follicular cysts • Give characters of teratomas • Define laboratory tests use full for evaluating adenexal masses. Give characteristics which warrant surgical exploration of adenexal masses.	Border line + bengien ovarian tumors Take + present detailed history Perform abdominal examination		Case presentation		
Friday	Ward Test						

GYNECOLOGY/OBSTETRIC CLERKSHIP

Duration 8 Weeks 1st Week

OBSTETRICS

Activities

Interactive Session	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
TIME	Brig.Nadra	Dr.Taqdees	Dr.JehanAra	Dr.Mumtaz	Dr.Naila	
08:00-09:00	Antenatal Care	Gestational Hypertension	Gestational Diabetes	Fetal Anomalies	Cardiac Disease in pregnancy	
09:00-10:00	LGIS	LGIS	LGIS	LGIS	LGIS	
10:00-11:00	SDL	SDL	SDL	SDL	SDL	
11:00-11:30						
11:30-12:30	Presentation	Presentation	Presentation	Counseling	Presentation	
12:30-03:00	Marking	Marking	Marking	Marking	Marking	

GYNECOLOGY/OBSTETRIC CLERKSHIP

2nd Week

OBSTETRICS

Activities

Interactive Session	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
TIME	Brig.Nadra	Dr.Taqdees	Dr.JehanAra	Dr.Mumtaz	Dr.Naila	
08:00-09:00	Thyroid Disease in pregnancy	Liver Disease in Pregnancy	Intrauterine fetal death	Iron Deficiency Anemia	Thrombo-embolic disease in pregnancy	
09:00-10:00	LGIS	LGIS	LGIS	LGIS	LGIS	
10:00-11:00	SDL	SDL	SDL	SDL	SDL	
11:00-11:30						
11:30-12:30	Presentation	Presentation	Counseling	Counseling	DRILL	
12:30-03:00	Marking	Marking	Marking	Marking	Marking	

GYNECOLOGY/OBSTETRIC CLERKSHIP

3rd Week

OBSTETRICS

Activities

Interactive Session	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
TIME	Brig.Nadra	Dr.Taqdees	Dr.JehanAra	Dr.Mumtaz	Dr.Naila	
08:00-09:00	Thalassemia In Pregnancy	Antepartum Hemorrhage	Preterm Labour	Twin pregnancy multiple gestation	Maternal collapse	
09:00-10:00	LGIS	LGIS	LGIS	LGIS	LGIS	
10:00-11:00	SDL	SDL	SDL	SDL	SDL	
11:00-11:30						
11:30-12:30	Presentation	DRILL	Counseling	Counseling	DRILL	
12:30-03:00	Marking	Marking	Marking	Marking	Marking	

GYNECOLOGY/OBSTETRIC CLERKSHIP

4th Week

OBSTETRICS

Activities

Interactive Session	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
TIME	Brig.Nadra	Dr.Taqdees	Dr.JehanAra	Dr.Mumtaz	Dr.Naila	
08:00-09:00	Fetalmontering	Normal labour CTG Partogram	Prenatal infection	Primary + Secondary dysfunctional labour	Malpresentation Breech	
09:00-10:00	LGIS	LGIS	LGIS	LGIS	LGIS	
10:00-11:00	SDL	SDL	SDL	SDL	SDL	
11:00-11:30						
11:30-12:30	Presentation	Presentation	Presentation	Counseling	DRILL	
12:30-03:00	Marking	Marking	Marking	Marking	Marking	

GYNECOLOGY/OBSTETRIC CLERKSHIP

5th Week

OBSTETRICS

Activities

Interactive Session	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
TIME	Brig.Nadra	Dr.Taqdees	Dr.JehanAra	Dr.Mumtaz	Dr.Naila	
08:00-09:00	Complication Of 3rd Stage Of Labour	Cord prolapse uterine inversion uterine rupture VBAC	Instrumental delivery	Caesarean section	Puerperal problems puerperal sepsis post partum psychotic disorders	
09:00-10:00	LGIS	LGIS	LGIS	LGIS	LGIS	
10:00-11:00	SDL	SDL	SDL	SDL	SDL	
11:00-11:30						
11:30-12:30	Presentation	Presentation	Presentation	Counseling	DRILL	
12:30-03:00	Marking	Marking	Marking	Marking	Marking	

GYNECOLOGY/OBSTETRIC CLERKSHIP

6th Week

GYNAECOLOGY

Activities

Interactive Session	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
TIME	Brig.Nadra	Dr.Taqdees	Dr.JehanAra	Dr.Mumtaz	Dr.Naila	
08:00-09:00	Menstrual cycle + AUB	Fibroid Uterus	Ch pelvic pain	Lower genital tract infection	PID	
09:00-10:00	LGIS	LGIS	LGIS	LGIS	LGIS	
10:00-11:00	SDL	SDL	SDL	SDL	SDL	
11:00-11:30						
11:30-12:30	Presentation	Presentation	Presentation	Presentation	Presentation + Marking	
12:30-03:00	Marking	Marking	Marking	Marking		

GYNECOLOGY/OBSTETRIC CLERKSHIP

7th Week

GYNAECOLOGY

Activities

Interactive Session	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
TIME	Brig.Nadra	Dr.Taqdees	Dr.JehanAra	Dr.Mumtaz	Dr.Naila	
08:00-09:00	Menopause	Urinary incontinence	UV prolapse	GTD	Endometriosis + Adenomycsis	
09:00-10:00	LGIS	LGIS	LGIS	LGIS	LGIS	
10:00-11:00	SDL	SDL	SDL	SDL	SDL	
11:00-11:30						
11:30-12:30	Presentation	Presentation	Presentation	Presentation	Presentation + Marking	
12:30-03:00	Marking	Marking	Marking	Marking		

GYNECOLOGY/OBSTETRIC CLERKSHIP

8th Week

GYNAECOLOGY

Activities

Interactive Session	MONDAY 24/02	TUESDAY 25/02	WEDNESDAY 26/02	THURSDAY 27/02	FRIDAY 28/02	SATURDAY 29/02
TIME	Brig.Nadra	Dr.Taqdees	Dr.JehanAra	Dr.Mumtaz	Dr.Naila	
08:00-09:00	CIN+ CaCx	Ca Endometriosis	Ca Ovary	Begnien Ovarian tumors	Ward Test	
09:00-10:00	LGIS	LGIS	LGIS	LGIS		
10:00-11:00	SDL	SDL	SDL	SDL		
11:00-11:30						
11:30-12:30	Presentation	Presentation	Presentation	Presentation		
12:30-03:00	Marking	Marking	Marking	Marking		

EVIDENCE FOR CLERKSHIP A: CLINICAL			
#	ACTIVITIES	MAX SCORE%	SCORE
1	OSCE (including short Cases)	70	
2	CLINCAL ENCOUNTERS	5	
3	MORNING REPORTS/CASE DISCUSSIONS	5	
4	CLINICAL SKILLS	10	
5	MINI-CEX	10	
TOTAL		100	

B:THEORY			
#	ACTIVITIES	MAX SCORE%	SCORE
1	MCQ'S	60	
2	SAQ'S	40	
TOTAL		100	

Mini-CEX

Mini-CEX information: Encircle whichever is applicable										
Diagnosis:					Case setting: OPD IPD ER			Patient: New Follow-up		
Case complexity: Low Moderate High					Assessor Position/Rank:					
Focus of Mini-CEX: History & Physical examination Diagnosis Management Counseling										
Mini-CEX Scoring: encircle against N/A if not observed or applicable										
Medical Interview	N/A	1	2	3	4	5	6	7	8	9
Physical examination	N/A	1	2	3	4	5	6	7	8	9
Professionalism	N/A	1	2	3	4	5	6	7	8	9
Clinical Judgment	N/A	1	2	3	4	5	6	7	8	9
Counseling & communication Skill	N/A	1	2	3	4	5	6	7	8	9
Overall Rating	1	2	3	4	5	6	7	8	9	10
ssessor's Comments on Students performance										
Anything Especially Good					Suggestions For Development					
Agreed Actions (To be written by student):										
Student Satisfaction	1	2	3	4	5	6	7	8	9	Time for observatin:
ssessor's Satisfaction	1	2	3	4	5	6	7	8	9	Time for feedback:

Assessor Name: Assessor Signature: