

**DEPARTMENT OF PATHOLOGY**  
**THIRD TERM PRACTICALS**

SLIDES	SPECIMENS	INSTRUMENTS	CHARTS	TUTORIAL	DEMO
Fatty change	Fatty Liver	L-Mould	Thalessemia	Tissue processing and H & E staining	ESR
Cloudy change kidney	MI with Intramural thrombus	Vacutainers & needle	IDA	Microscopy	Retic
Monckeberg's medial calcific sclerosis	CPVC Liver (Nutmeg Liver)	Hb Sahli's	Megaloblastic anemia	Identification of cell	Cells
Leiomyoma with hyaline change	Acute appendicitis	Casette	Aplastic anemia	Collection of blood	Microscope
Acute appendicitis	Calculus cholecystitis	Blocks		BM examination	Histotechniques
Acute Pyogenic meningitis	LVH	ESR tube (Both)		Estimation of HB	Hb by Drabkin's
Chronic choecystitis	CVC spleen	BM needles		IDA	BM needles, CSF, Liver biopsy
Granulation tissue		WBC pipette		ESR	Blood collection
Iron deficiency anemia		RBC pipette		Megaloblastic anemia	Leishman's stain
Megaloblastic anemia		Neubaur chamber (Haemocytometer)		Hemolytic anemia	
CPC lung		Turk's fluid		Retic count	
CPC Liver		10% formalin		TLC	
Hemolytic anemia		Bouin's fluid		Autopsy-1 MI	
Myocardial infarct/ coagulative necrosis		Absolute alcohol			
Tuberculous lymphadenitis / Caseous necrosis		Xylene			
Organised thrombus		H & E stain			

THIRD TERM - THEORY					
S.No	Topic	No. of Lectures			
1	Introduction to Pathology (n=1)	1			
2	<b><u>Cell as a unit of health and disease (n=4)</u></b> a. The genome b. Cellular Housekeeping c. Cellular metabolism and Signal transduction d. Extracellular matrix and maintaining cell populations	4			
3	<b><u>Cell injury (n=6)</u></b> a. Cellular adaptations b. Reversible/ Irreversible cell Injury c. Mechanism of cell injury d. Apoptosis e. Intracellular Accumulations, calcification f. Necroptosis, Autophagy and Cellular aging	6			
4	<b><u>Inflammation and repair (n=7)</u></b> a. Introduction & Overview b. Acute inflammation- Vascular changes c. Acute inflammation- Cellular changes d. Chemical Mediators e. Morphological patterns of Acute Inflammation f. Chronic Inflammation and systemic Effects of Inflammation g. Tissue repair	7			
5	<b><u>Hemodynamic Disorders (n=6)</u></b> a. Edema, Hyperaemia , congestion b. Haemostasis-overview c. Thrombosis d. Embolism e. Infarction f. Shock, DIC	6			
6	<b><u>Genetics (n=3)</u></b> a. Introduction and mendelian disorders b. Chromosomal disorders c. Molecular Genetic Diagnosis	3			
7	<b><u>Immunity (n=6)</u></b> a. Normal Immune response b. Hypersensitivity Reaction c. Autoimmune Disease d. Transplant Rejection e. Immune deficiency Syndromes f. Amyloidosis	6			
8	<b><u>Neoplasia (n=8)</u></b> a. General consideration and Epidemiology b. Carcinogenesis I Molecular basis of cancer c. Carcinogenesis II Oncogenes and Tumor suppressor genes d. Angiogenesis and Metastasis e. Carcinogenesis III Genomic Instability and Epigenetics f. Chemical and Microbial Carcinogenesis g. Tumour Immunity and Paraneoplastic Syndromes h. Clinical aspects and Lab diagnosis of Cancer	8			

9	<b>Environmental &amp; Nutritional Disease (n=2)</b> a. Environmental disorders: Smoking, Alcohol and Radiation b. Nutritional Disorders: PEM and Obesity	2			
10	<b>Infectious disease (n=3)</b> a. Syphilis b. Tuberculosis c. Leprosy	3			
11	<b>Diseases of Infancy and Childhood (n=2)</b> a. Non neoplastic: Neonatal RDS, Fetal Hydrops , Cystic Fibrosis b. Neoplastic: Hemangioma, Neuroblastoma, Wilm's tumor	2			
<b>Total</b>		<b>48</b>			
<b>HEMATOLOGY (n=12)</b>					
<b>S.No</b>	<b>Topic</b>	<b>No. of Lectures</b>			
1	Haematopoiesis and Classification of Anaemia				
2	Iron deficiency Anaemia				
3	Megaloblastic Anaemia				
4	Hemolytic anaemia 1/2				
5	Hemolytic Anemia 2/2				
6	Anemia of chronic diseases.				
7	Aplastic Anemia				
8	Bleeding disorders 1/2				
9	Bleeding disorders 2/2				
10	Morphology of WBCs				
11	Benign Leucocytic Disorders				
12	Reactive proliferation of Lymph nodes and Spleen				
<b>Total</b>		<b>12</b>			

**DEPARTMENT OF PATHOLOGY  
FOURTH TERM PRACTICALS**

SLIDES	SPECIMENS	INSTRUMENTS	CHARTS	TUTORIAL	DEMO
Fibroid (leiomyoma)	LVH	LP Needles	CLL	DLC	
Lymph node metastasis	IE vegetation	Urinometer	Obstructive jaundice	Blood group	
Haemangioma (capillary)	Mitral valve vegetation	Anti- A,B,O & D antisera	Pre-hepatic Jaundice	CSF	
Haemangioma (cavernous)	MI with intramural thrombus	Urine strip	BM-AML	Acute leukemia	
Acute myeloid leukemia	Lymphoma deposit heart	Leishman stain	AML	CML	
Chronic myeloid leukemia	Atherosclerosis aorta	Giemsa stain	CML in blats cirrhosis	Morphology of mature cystic leukocytes	
Squamous papilloma	Empyema lung With COPD	Benedict's reagent	Hep. Cellular Jaundice	PBS staining and DLC	
Squamous cell carcinoma	Secondary TB Lung		CML	Urine-1 & 2	
TB leprosy	Bronchiectasis		Leukemoid reaction	Autopsy-3 Acute Pancreatitis	
Lepromatous leprosy	Bronchiectasis with emphysema				
Lobar pneumonia	Adeno Ca Lung				
Broncho pneumonia	Metastatic Adeno Ca Lung				
Atherosclerosis/atheromatous plaque	Metastatic deposit Lung				
Organized thrombus	Ca esophagus with Infiltrate in stomach				
Fibrocaceous TB lung	Multiple polyposis stomach				
Hodgkin's lymphoma	Gastro duodenal intusseption				
Peptic Ulcer	Multiple polyp colon				
Typhoid ulcer	Crohn's disease				
Adeno carcinoma colon	Ulcerative colitis				
Amoebic ulcer-Colon (Demo)	Adeno Ca colon				
Fibroadenoma	Mucinous Adeno Ca colon				
Infiltrating duct carcinoma	Gastric Ca GEJ				
Acute liver failure	SI infarct				
Micronodular cirrhosis of liver	Multinodular goitre				
Adenomatous colloid goiter	Cirrhosis liver (HB-3)				
Hashimoto's thyroiditis	Cirrhosis liver (HB-5)				
Papillary carcinoma thyroid	Hepatocellular carcinoma				
	Acute liver failure				
	Chronic Cholecystitis				
	Ca gall bladder				
	Periampullary adeno Ca				
	Hemorrhagic pancreatitis				
	Gastric Ca				
	Infec. Endocarditis				
	Fibroadenoma				

<b>FOURTH TERM- THEORY</b>					
<b>S.No</b>	<b>Topic</b>	<b>No. of Lectures</b>			
1	<b>Blood vessels (n=5)</b> a. Introduction and Hypertensive vascular disease b. Atherosclerosis c. Aneurysms d. Vasculitis e. Tumors	5			
2	<b>Cardiovascular System (n=6)</b> a. Introduction & Heart Failure b. Ischemic Heart Disease – Pathogenesis and Angina c. Ischemic Heart Disease -MI d. Hypertension, Valvular Heart Disease e. Cardiomyopathy f. Pericarditis, Tumours	6			
3	<b>Lung (n=8)</b> a. Introduction, Atelectasis and Pulmonary Oedema b. COPD 1- Emphysema and Chronic Bronchitis c. COPD 2- Bronchial Asthma and Bronchiectasis d. Interstitial (Occupational)Lung disease e. Granulomatous and Vascular Lung Disease f. Pneumonia and Lung Abscess g. Lung Tumors 1- Squamous cell Ca, Adenoca h. Lung Tumors 2- Small cell ca, Paraneoplastic syndrome, Neuroendocrine tumors	8			
4	<b>Head Neck Face (n=1)</b> Leucoplakia, Oral SCC, Salivary gland tumors	1			
5	<b>GIT (n=10)</b> a. Introduction and congenital abnormalities b. Oesophagus- GERD, Barret's Oesophagus and Tumors c. Gastritis - H.pylori d. Peptic ulcer e. Tumours of Stomach f. Malabsorption Syndrome g. Ulcers of Intestine h. Inflammatory Bowel Disease i. Polyps of Intestine j. Colorectal carcinomas	10			
6	<b>Liver and bile ducts (n=7)</b> a. Introduction to liver, Hepatic failure, Cirrhosis, Portal HT b. Viral Hepatitis - 1 c. Viral Hepatitis – 2 d. Alcoholic liver disease e. Metabolic liver disease f. Intrahepatic biliary disease g. Neoplastic liver disease	7			
7	<b>Gall Bladder (n=2)</b> a. Cholelithiasis & cholecystitis b. CA gall bladder	2			
8	<b>Pancreas (n= 3)</b> a. Acute & chronic pancreatitis b. Diabetes c. Pancreatic tumours	3			
9	<b>The Breast (n=2)</b> a. Benign diseases of the Breast b. Breast tumors	2			
10	<b>Endocrine System (n=3)</b> a. Thyroid 1/2 - Non neoplastic Thyroid b. Thyroid 2/2 -Neoplastic lesions c. Adrenal Gland	3			
11	<b>Bone and Joints (n=3)</b> a. Non neoplastic diseases of Bone b. Bone tumors c. Diseases of the joints	3			
<b>Total</b>		<b>50</b>			
<b>HEMATOLOGY (n=10)</b>					
<b>S.No</b>	<b>Topic</b>	<b>No. of Lectures</b>			
1	General concepts in Leukaemia				
2	Acute Leukemia (1/2)				
3	Acute Leukemia (2/2)				
4	Myeloproliferative disorders				
5	Chronic Leukemias				
6	Immunohematology & Blood Group (1/2)				
7	Immunohematology & Blood Groups (2/2)				
8	Lymphoma 1/2 - Hodgkin's Lymphoma				
9	Lymphoma 1/2 -Non -Hodgkin's Lymphoma				
10	Multiple Myeloma				
<b>Total</b>		<b>10</b>			

**DEPARTMENT OF PATHOLOGY  
FIFTH TERM- PRACTICALS**

SLIDES	SPECIMENS	INSTRUMENTS	CHARTS	TUTORIAL	DEMO
Enchondroma	Osteosarcoma bone tibia	LP Needle	TB meningitis	Autopsy-2 Liver cirrhosis	
Benign prostate hyperplasia	Solid ovarian tumour	Vim Silvermann's Needle	Viral Meningitis	Liver biopsy	
Seminoma Testis	Wilm's tumour (US-12,13)		Acute pyogenic meningitis	LFT	
Basal cell carcinoma	Serous cystadenoma (FGT-2,3)		Diabetic curve	GTT	
Malignant melanoma	Mucinous cystadenoma (FGT-4)		Acute UTI		
Chronic Glomerulonephritis	Paratesticular mass		Lag/Alimentary glycosuria		
Crescentic Glomerulonephritis (Demo)	Seminoma Testis (MGT-4,8)		Acute nephritic syndrome		
Chronic Pyelonephritis	Germ cell tumour testis (MGT-5,9)		Nephrotic syndrome		
Renal cell carcinoma	Mixed GCT Testis				
Product of Conception	BPH				
Mature cystic teratoma	SCC Penis				
Osteoclastoma (GCT)	Urinary Bladder- urothelial Ca				
Osteogenic sarcoma	Multinodular goitre				
Intradermal nevus	Pheochromocytoma				
Meningitis	Nodular goitre thyroid				
Melanoma	Follicular neoplasm thyroid				
	Flea bitten kidney				
	Polycystic kidney (US-1,6)				
	B/L hydronephrosis				
	Pyelonephritis				
	RCC (11,16)				
	Leiomyoma uterus				
	cervical polyps				
	Leiomyoma broad ligament uterus				
	SCC- Skin				
	Madura mycosis				
	Granuloma cell tumour				
	Intra cerebral Hemorrhage				
	Sub-dural hematoma				
	Intraventricular bleed				

S.No	FIFTH TERM- THEORY Topic	No. of Lectures			
1	<b><u>Kidney (n=9)</u></b> a. Introduction & Mechanism of Glomerular Disease b. Nephritic Syndrome and RPGN c. Nephrotic Syndrome d. Diabetic Nephropathy, Amyloidosis and other cause of Secondary GN e. Chronic GN, SLE f. Tubulointerstitial disease g. Vascular disease of Kidney h. Cystic renal disease and obstruction uropathy i. Tumors of Kidney	9			
2	<b><u>Male Genital and Lower urinary tract (n=3)</u></b> a. Penile lesions and BPH b. CA Prostate c. Testicular Tumors	3			
3	<b><u>Female Genital tract (n=5)</u></b> a. Lesions of cervix b. Lesions of uterus c. Lesions of ovary 1- Non Neoplastic lesions and Surface epithelial tumors d. Lesions of the ovary 2- Germ cell tumors and sex cord stromal tumors e. Gestational Trophoblastic disease	5			
4	<b><u>Skin (n=2)</u></b> a. Inflammatory and Non Neoplastic Lesion b. Neoplastic Lesion	2			
5	<b><u>CNS (n=5)</u></b> a. Cerebrovascular diseases b. Infection of the CNS c. Prion and demyelinating disorders d. Neurodegenerating and metabolic diseases e. Tumours of CNS	5			
6	Soft tissue tumors (n=1)	1			
7	Pathology of Eye (n=1)	1			
8	Peripheral Nerve (n=1)	1			
9	Revision Classes	23			
	<b>Total</b>	<b>50</b>			