

St.James College of Pharmaceutical Sciences St.James medical Academy River Bank, Chalakudy			
Programme:	B.Pharm	Sem.:	second
Name of Course: (Subject)	Pathophysiology	Course Code:	BP.204T
Teaching faculty of the course	Dr.Grace Thomas		

Summary of the Lecture Plan

Topic	Lectures	Hours
Basic principles of Cell injury and Adaptation	Components and type of feedback systems	1
	Cell injury and Adaptations	3
	Acidosis & Alkalosis	1
	Electrolyte imbalance	1
Basic mechanism involved in the process of inflammation and repair	Inflammation	1
	Chemical mediators in inflammation	1
	healing of wounds	1
	Pathophysiology of Atherosclerosis	1
Cardiovascular System	Hypertension	1
	congestive heart failure	1
	ischemic heart disease	4
Respiratory system	Asthma	1
	Chronic obstructive airways diseases	1
Renal system	Acute renal Failure	1
	chronic renal failure	1
Haematological Diseases	Iron deficiency anemia Megaloblastic anemia	1
	Sickle cell anemia Thalasemia	1
	Hereditary acquired anemia Hemophilia	1
Endocrine system	Diabetes	2
	Thyroid diseases and disorders of sex hormones	1
Nervous system & psychiatric disorders	Epilepsy Parkinson's disease	2
	Stroke Depression	1
	Schizophrenia Alzheimer's disease	1
Gastrointestinal	Peptic Ulcer	1

system	Inflammatory bowel diseases Jaundice	1
	Hepatitis (A,B,C,D,E,F) Alcoholic liver disease	1
Disease of bones and joints	Rheumatoid Arthritis	1
	Osteoporosis Gout	2
Principles of cancer	Classification, etiology of cancer	1
	Pathogenesis of cancer	2
Infectious diseases	Meningitis	1
	Typhoid	1
	Leprosy Tuberculosis	1
	Urinary tract infections	1
Sexually transmitted diseases	AIDS	1
	Syphilis	1
	Gonorrhea	1

Major issues or Core aspects to be addressed/ covered:

Unit I: Basic principles of cell injury and Adaptation Basic mechanism involved in the process of inflammation and repair
Causes, Pathogenesis and morphology of cell injury
Components and Types of Feedback systems
Cell swelling, Intra cellular accumulation, Calcification, Enzyme leakage and Cell Death
Causes of cellular injury, Pathogenesis (Cell membrane damage, Mitochondrial damage, Ribosome damage, Nuclear damage)
Pathogenesis of acute inflammation, Chemical mediators in inflammation, Types of chronic inflammation, Repairs of wounds in the skin, factors influencing healing of wounds
Alteration in vascular permeability and blood flow, migration of WBC's
Unit II: Cardiovascular, Respiratory and Renal systems
Etiology and pathophysiology of Hypertension, congestive heart failure, ischemic heart disease (angina, myocardial infarction, atherosclerosis and arteriosclerosis)
Etiology and pathophysiology of Asthma, Chronic obstructive airways diseases Acute and chronic renal failure
Unit III: Haematological Diseases, Endocrine, Gastrointestinal and Nervous systems & psychiatric disorders
Definition and etiopathogenesis of Iron deficiency, megaloblastic anemia (Vit B12 and folic acid), sickle cell anemia, thalassemia, hereditary acquired anemia, hemophilia
Definition, Classification and Pathophysiology of Diabetes, thyroid diseases, disorders of sex hormones
Epilepsy, Parkinson's disease, stroke, psychiatric disorders: depression, schizophrenia and Alzheimer's disease, Peptic Ulcer, Inflammatory bowel diseases, jaundice, hepatitis (A,B,C,D,E,F) alcoholic liver disease.

Unit IV: Disease of bones and joints, Principles of cancer
Rheumatoid arthritis, osteoporosis and gout details
classification, etiology and pathogenesis of cancer
Unit IV :Infectious diseases,Sexually transmitted diseases
Definition,Categories and pathophysiology of Meningitis, Typhoid, Leprosy, Tuberculosis Urinary tract infections AIDS, Syphilis and Gonorrhoea

Sample Questions

Unit I:Basic principles of cell injury and Adaptation Basic mechanism involved in the process of inflammation and repair
Explain Causes, Pathogenesis and morphology of cell injury
Describe Components and Types of Feedback systems
Define Cell swelling, What is Intra cellular accumulation, explain Calcification, Describe Enzyme leakage and Cell Death
List out Causes of cellular injury, Explain Pathogenesis (Cell membrane damage, Mitochondrial damage,Ribosome damage, Nuclear damage)
Explain Pathogenesis of acute inflammation, Describe about Chemical mediators in inflammation
Define and explain chronic inflammation, Repairs of wounds in the skin, factors influencing healing of wounds
What is alteration in vascular permeability and blood flow, migration of WBC's
Unit II: Cardiovascular,Respiratory and Renal systems
Etiology and pathophysiology of Hypertension, congestive heart failure, ischemic heart disease (angina, myocardial infarction, atherosclerosis and arteriosclerosis)
Etiology and pathophysiology of Asthma, Chronic obstructive airways diseases Define and describe Acute and chronic renal failure
Unit III: Haematological Diseases, Endocrine,Gastrointestinal and Nervous systems & psychiatric disorders
Definition and etiopathogenesis of Iron deficiency, megaloblastic anemia (Vit B12 and folic acid), sickle cell anemia, thalassemia, hereditary acquired anemia, hemophilia
Definition,Classification and Pathophysiology of Diabetes, thyroid diseases, disorders of sex hormones
Explain Epilepsy, write in detail about Parkinson's disease, Define and classify stroke, Classification of depression, Pathophysiology of schizophrenia and Describe about the etiological factors of Alzheimer's disease, Define and explain Peptic Ulcer, Describe in detail about Inflammatory bowel diseases, Causative Factors of jaundice, Classify hepatitis (A,B,C,D,E,F) , Pathophysiology of alcoholic liver disease.

Unit IV: Disease of bones and joints, Principles of cancer

Describe Rheumatoid arthritis, Pathophysiology of osteoporosis and Define and describe gout in detail

Define and Describe etiology and pathogenesis of cancer

Unit IV :Infectious diseases,Sexually transmitted diseases

Categories and pathophysiology of Meningitis, Pathophysiology of Typhoid, Etiopathogenesis of Leprosy, Diagnosis and Clinical features of Tuberculosis, types of Urinary tract infections , Opportunistic Infections related to AIDS, Classification of Syphilis and Describe about Gonorrhoea