

LJ UNIVERSITY

LJ INSTITUTE OF PHARMACY

SEMESTER: II

Subject Name: PATHOPHYSIOLOGY

Subject Code: BP205TP

Scope: Pathophysiology is the study of causes of diseases and reactions of the body to such disease producing causes. This course is designed to impart a thorough knowledge of the relevant aspects of pathology of various conditions with reference to its pharmacological applications, and understanding of basic pathophysiological mechanisms. Hence it will not only help to study the syllabus of pathology, but also to get baseline knowledge required to practice medicine safely, confidently, rationally and effectively.

Objectives: Upon completion of the course student shall be able to

1. Explain the mechanisms of cell injury
2. Describe various factors, etiology and pathway involved in cell injury
3. Explain types and pathways of inflammation.

Teaching scheme and examination scheme:

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	Theory		Practical	
				External	Internal	External	Internal
1	0	0	1	35	15	-	-

Module	Course Contents	Hours
1	1.1 Basic principles of cell injury and adaptation: Introduction, definitions, Causes of cellular injury, Pathogenesis, Morphology of cell injury – Adaptive changes (Atrophy, Hypertrophy, hyperplasia, Metaplasia, Dysplasia), Intra cellular accumulation, Calcification, Apoptosis and Necrosis 1.2 Mechanism involved in the process of inflammation and repair: Introduction, Clinical signs of inflammation, Different types of Inflammation, Mechanism of Inflammation	15

Reference Books: (Latest Editions):

1. Vinay Kumar, Abul K. Abas, Jon C. Aster; Robbins & Cotran Pathologic Basis of Disease; South Asia edition; India; Elsevier; 2014.
2. Harsh Mohan; Text book of Pathology; 6th edition; India; Jaypee Publications; 2010.

Recommended Journals:

1. The Journal of Pathology. ISSN: 1096-9896 (Online)
2. The American Journal of Pathology. ISSN: 0002-9440
3. Pathology. 1465-3931(Online)
4. International Journal of Physiology, Pathophysiology and Pharmacology. ISSN: 1944-8171 (Online)
5. Indian Journal of Pathology and Microbiology. ISSN-0377-4929