

**COURSE TITLE: PATHOLOGY**

**STUDY HOURS: 80+40**

**PAPER: 1**  
**TERM: 2<sup>nd</sup>**

**MARKS**

**THEORY: 80**  
**PRACTICAL: 20**  
**TIME: 2.30 HRS**

The following pathology contents will be taught briefly.

<b>COURSE CONTENTS</b>	<b>STUDY HOURS</b> (THEORY+PRACTICAL)
Introduction:	
<b>A Pathology</b>	<b>2</b>
<b>A1</b> Definition	
<b>A2</b> Branches	
<b>B. Core of pathology</b>	<b>4</b>
<b>B1</b> Etiology	
<b>B2</b> Pathogenesis	
<b>B3</b> Morphologic changes	
<b>B4</b> Clinical significance	
<b>C. Disease</b>	<b>4+2</b>
<b>C1</b> Definition	
<b>C2</b> Classification	
<b>C3</b> Cytology	
<b>C4</b> Biopsy	
<b>D.Cell injury:</b>	<b>12+4</b>
<b>D1</b> Normal Cell and Structure of Cell	
<b>D2</b> Cellular adaptation (introduction)	
D2.1Hyperplasia	
D2.2Hypertrophy	
D2.3Atrophy	
D2.4Metaplasia	
D2.5Distribution of body Epithelium	
<b>D3</b> Cell Injury	
D3.1Types	
D3.2Causes	
<b>D4</b> Necrosis	
D4.1Definition	
D4.2Types	

- D4.2 Mechanism of Necrosis
- D5 Pigmentation
  - D5.1 Definition
  - D5.2 Types
- D6 Pathologic calcification
  - D6.1 Definition
  - D6.2 Types
  - D6.3 Causes Of Hyper calcification
- D7 Gangrene
  - D7.1 Definition
  - D7.2 Causes
  - D7.3 Types
  - D7.4 Complication

**E Inflammation 12+4**

- E1 Definition
- E2 Advantage and Disadvantage of inflammation
- E3 Types
- E4 Acute Inflammation
  - E4.1 Definition
  - E4.2 Changes in acute inflammation
  - E4.3 Clinical signs of actual inflammation
  - E4.4 Outcome of Ac inflammation
  - E4.5 Type of inflammatory cell
  - E4.6 Sequence of Cellular Events
- E5 Chronic Inflammation
  - E5.1 Causes
  - E5.2 Types
  - E5.3 Outcome of Ch. Inflammation.
  - E5.4 Difference between Ac. & Ch. Inflammation

**F Repair: 8+2**

- F1 Definition Process of repair
- F2 Capacity of Different cell Type
- F3 Healing by First. Intention (introduction)
- F4 Healing by 2<sup>nd</sup> Intention (introduction)
- F5 Difference between 1<sup>st</sup> & 2<sup>nd</sup> intention
- F6 Factors affecting wound healing
  - F6.1 Systemic
  - F6.2 Local
- F7 Complication of wound healing

**G Homodynamic Disorder 12+4**

- G1 Edema
  - G1.1 Definition and pathogenesis

- G1.2 Mechanism of edema
- G1.3 Causes
- G1.4 Types
- G1.5 Clinical effects
- G2 Hyperemia & Congestion
  - G2.1 Definition
  - G2.2 Causes
- G3 Hemorrhage
  - G3.1 Definition
  - G3.2 Causes
  - G3.3 Clinical Features
- G4 Thrombosis
  - G4.1 Definition
  - G4.2 Types (morphological, clinical)
  - G4.3 Fate of thrombus
- G5 Embolism
  - G5.1 Definition
  - G5.2 Clinical Effects
  - G5.3 Classification
- G6 Infarction
  - G6.1 Definition
  - G6.2 Causes
  - G6.3 Types
  - G6.4 Predisposing factors

**H. Shock**

4+2

- H1 Definition
- H2 Types
- H3 Stages

**K Disorders of immunity**

4+2

- K1 Immunity Definition
- K2 Types
- K3 Antigen
- K4 Antibody & types
- K5 Cells of Immune system (introduction)
- K6 Hypersensitivity Reactions (introduction)

**L Neoplasia**

12+4

- L1 Definition
- L2 Neoplasia
- L3 Neoplasm

- L4 Oncology
- L5 Dysplasia
  - L5.1 Definition
  - L5.2 Causes
  - L5.3 Sites
  - L5.4 Clinical significance
- L6 Types of neoplasm
  - L6.1 Benign
  - L6.2 Malignant
  - L6.3 Different Between Benign and malignant Tumors
- L7 Nomenclature of Neoplasm
- L8 Spread of Neoplasm
- L9 Staging & Grading of Neoplasm
- L10 Clinical features of Neoplasm
- L11 Difference between benign & Malignant Neoplasm
- L12 Carcinogens and its types

## **M Microbiology**

**16+6**

- M1 Parasite
- M2 Parasitology
  - M2.1 Definition
  - M2.2 Classification of Parasites
- M3 Virology
  - M3.1 Definition
  - M3.2 Classification of viruses
- M4 Bacteriology
  - M4.1 Definition
  - M4.2 Classification of Bacteria

**Recommended book:** Textbook of Pathology by Inam Danish  
Textbook of Pathology by Ferdous

**Reference book:** General Pathology by Walter and Israel