

This question paper contains 3 printed pages]

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

S. No. of Question Paper : 13325

Unique Paper Code : 3184000027

Name of the Paper : Pathological Basis of Disease

Name of the Course : Generic Elective (GE)

Semester : VII

Duration : 3 Hours

Maximum Marks : 90

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt five questions in all.

Question No. 1 is compulsory.

Subparts of the questions should be attempted together.

Draw illustrations or diagrams wherever necessary.

1. (a) Define the following (any four) :

4×1=4

(i) Histopathology

(ii) Hypertrophy

(iii) Hypoxia

(iv) Embolism

(v) Angiogenesis.

P.T.O.

5×3=15

(b) Justify true or false (any five) :

- (i) Histopathology deals with the microscopic study of tissues.
- (ii) Imaging techniques help in visualising internal body structures.
- (iii) Pathological diagnosis depends on both biochemical and imaging findings.
- (iv) Atrophy leads to an increase in organ size.
- (v) Apoptosis does not elicit inflammation.
- (vi) Metaplasia is a reversible change from one cell type to another.

(c) Differentiate between (any three) :

3×3=9

- (i) Benign and malignant tumour histopathology
- (ii) Radiography and ultrasonography
- (iii) Qualitative and quantitative biochemical tests
- (iv) Cellular injury and cellular adaptation.

(d) Expand the following (any two) :

2×1=2

- (i) DVT
- (ii) ECG
- (iii) ESRD.

2. Write short notes on the following :

5,5,5

- (a) Morphological patterns of inflammation (example : tuberculosis).
- (b) Red and white infarcts.
- (c) The stages of shock and their effects.

3. (a) Discuss the role of blood coagulation disorders in causing haemorrhage and thrombosis. 9
- (b) Discuss the mechanism of fibrosis and scar formation. 6
4. (a) Analyse the relationship between embolism, and tissue necrosis. Explain the morphological and biochemical characteristics. 9
- (b) Explain Virchow's triad and its significance in thrombosis formation. 6
5. (a) Analyse the role of chemical mediators in the regulation of inflammatory response. 9
- (b) Explain the different stages of cancer and explain how staging and grading of cancer prognosis can be done using histopathological techniques. 6
6. (a) Describe in detail the mechanism and outcome of cell injury. Explain the role of oxidative stress and free radical production and the cascade of events in cellular damage. 9
- (b) Discuss the process of tissue regeneration using liver regeneration as an example. 6