

GUJARAT TECHNOLOGICAL UNIVERSITY**B.Pharm – SEMESTER-III – EXAMINATION – SUMMER-2016****Subject Code: 230005****Date: 13/05/2016****Subject Name: Pathophysiology****Time: 2:30 PM to 5:30 PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Enumerate causes of cell injury and Explain cellular and molecular mechanism of irreversible cell injury. **06**
(b) Define apoptosis. Explain molecular mechanism and importance of apoptosis. **05**
(c) Explain the terms: Hypertrophy, Atrophy, Hyperplasia, Metaplasia. **05**
- Q.2** (a) Define acute inflammation and write in detail about cell events occur in acute inflammation. **06**
(b) Explain the mechanism of allograft rejection. **05**
(c) Write a note on protein energy malnutrition. **05**
- Q.3** (a) Explain sequence of events in primary skin wounds. How does the secondary union of skin wounds differ from primary union? **06**
(b) Discuss the etiology of starvation and the metabolic changes take place in starvation. **05**
(c) Write a note on extracellular matrix **05**
- Q.4** (a) Define and classify amyloidosis. Explain the pathogenesis and clinical manifestations in amyloidosis. **06**
(b) Discuss the etiology and pathogenesis of fatty liver. **05**
(c) Enlist process of healing of skin wounds. Explain angiogenesis. **05**
- Q.5** (a) Define autoimmunity. Explain pathogenesis and clinical manifestation of rheumatoid arthritis. **06**
(b) Explain vitamin B₁₂ deficiency. **05**
(c) Write a note on vasoactive amines. **05**
- Q. 6** (a) Discuss etiology, pathogenesis and clinical manifestations of AIDS. **06**
(b) Write a note on pathogenesis of Systemic Lupus Erythematosus. **05**
(c) Write a note on carbon monoxide poisoning. **05**
- Q. 7** (a) Biological effects of radiation. **06**
(b) Give difference between (i) Chemotaxis and Phagocytosis and (ii) Dystrophic and Metastatic calcification. **05**
(c) Define necrosis. Give its type and associated morphological changes. **05**
