

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM - SEMESTER- 3 EXAMINATION – SUMMER -2019**

**Subject Code: 230005**

**Date: 07-06-2019**

**Subject Name: Pathophysiology**

**Time: 02:30 PM TO 05:30 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 the types of hypersensitivity reactions. Explain about pathogenesis of B-cell mediated hypersensitivity reactions **06**  
(b) Classify nutritional diseases. Write note on Vitamin B12 deficiency. **05**  
(c) Write note on amyloidosis. **05**
- Q.2** (a) Discuss pathologic basis of fatty liver. **06**  
(b) What is calcification? Discuss types of calcifications with suitable examples. **05**  
(c) Write a note on carbon monoxide poisoning. **05**
- Q.3** (a) Discuss common diseases caused by environmental and occupational exposure. **06**  
(b) Define healing. Discuss primary union of skin wounds. **05**  
(c) Explain the mechanisms of rejection of allografts in hosts. **05**
- Q.4** (a) Discuss basic mechanisms involved in inflammation. **06**  
(b) Define immunity. Add a note on adaptive immunity. **05**  
(c) Write a note on obesity. **05**
- Q.5** (a) Define apoptosis. Write in detail about mechanism of apoptosis. **06**  
(b) Write a note on biological effects of radiation. **05**  
(c) Explain the terms: **05**  
i. Natural killer cell ii. T lymphocytes iii. MHC molecule  
iv. Central tolerance v. Polyarteritis Nodosa
- Q. 6** (a) Explain the cellular and molecular mechanism of reversible and irreversible injury due to hypoxia/ischemia . **06**  
(b) Differentiate kwashiorkor and marasmus **05**  
(c) Discuss pathogenesis of AIDS. **05**
- Q.7** (a) Enlist various autoimmune diseases. Write a note on etiology and pathogenesis of systemic lupus erythematosus (SLE). **06**  
(b) Write in detail about components of extracellular matrix (ECM). **05**  
(c) Describe in brief glycogen storage diseases **05**

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