

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. Pharm. – SEMESTER – III • EXAMINATION – SUMMER 2013**

**Subject Code: 230005****Date: 14-06-2013****Subject Name: Pathophysiology****Time: 10.30 am - 01.30 pm****Total Marks: 80****Instructions:**

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

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|-------------|---|-----------|
| <b>Q.1</b>  | (a) Write note on etiology of cell injury   | <b>06</b> |
|             | (b) Enlist chemical mediators involved in inflammation. Discuss in detail about role of histamine in inflammation | <b>05</b> |
|             | (c) Define immunity. Add a note on adaptive immunity  | <b>05</b> |
| <b>Q.2</b>  | (a) Explain the cellular and molecular mechanism of reversible and irreversible injury due to hypoxia/ischemia    | <b>06</b> |
|             | (b) Explain mechanism of rejection of allograft in host   | <b>05</b> |
|             | (c) Explain vascular and cellular phase of acute inflammation   | <b>05</b> |
| <b>Q.3</b>  | (a) Define apoptosis. Give molecular mechanism and importance of apoptosis  | <b>06</b> |
|             | (b) Write note on amyloidosis   | <b>05</b> |
|             | (c) Define self tolerance and explain its mechanism   | <b>05</b> |
| <b>Q.4</b>  | (a) Explain mechanism of tissue repair  | <b>06</b> |
|             | (b) Differentiate acute and chronic inflammation  | <b>05</b> |
|             | (c) Discuss in brief about biological effects of radiation  | <b>05</b> |
| <b>Q.5</b>  | (a) Discuss in detail about type I hypersensitivity reaction  | <b>06</b> |
|             | (b) Define healing. Discuss primary union of skin wounds  | <b>05</b> |
|             | (c) Differentiate kwashiorkor and marasmus  | <b>05</b> |
| <b>Q. 6</b> | (a) Define and explain following  | <b>06</b> |
|             | 1. Hyperplasia  |           |
|             | 2. Hypertrophy  |           |
|             | 3. Atrophy  |           |
|             | (b) Enlist autoimmune disease. Write note on etiology and pathogenesis of rheumatoid arthritis                    | <b>05</b> |
|             | (c) Write note on components of extracellular matrix  | <b>05</b> |
| <b>Q.7</b>  | (a) Discuss pathologic basis of fatty liver   | <b>06</b> |
|             | (b) Write note on systemic lupus erythematosus  | <b>05</b> |
|             | (c) Write note on types of necrosis   | <b>05</b> |

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