

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm Sem-III Remedial Examination May 2011

Subject code: 230005

Subject Name: Pathophysiology

Date: 28/05/2011

Time : 10.30 a.m. – 01.30 p.m.

**Instructions:**

**Total Marks: 80**

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) | Explain the mechanism of increased vascular permeability in acute inflammation                             | <b>06</b> |
|             | (b) | Enumerate cells involved in immune mechanisms stating their significance                                   | <b>05</b> |
|             | (c) | Explain pathogenesis of calcification  | <b>05</b> |
| <b>Q.2</b>  | (a) | Enumerate chemical mediators of inflammation and detail their reactions.                                   | <b>06</b> |
|             | (b) | Explain the HLA system and major histocompatibility complex.   | <b>05</b> |
|             | (c) | Define apoptosis. Explain its causes and significance  | <b>05</b> |
| <b>Q.3</b>  | (a) | Define-homeostasis; hypertrophy; hyperplasia; atrophy; metaplasia; autophagy                               | <b>06</b> |
|             | (b) | Discuss biological effects of radiation  | <b>05</b> |
|             | (c) | Growth factors are an integral part of cell growth-Discuss   | <b>05</b> |
| <b>Q.4</b>  | (a) | Detail the process of Phagocytosis   | <b>06</b> |
|             | (b) | Write biological significance and deficiency diseases of retinol and calcitriol.                           | <b>05</b> |
|             | (c) | Detail mechanism of allograft rejection  | <b>05</b> |
| <b>Q.5</b>  | (a) | Explain the process of angiogenesis.   | <b>06</b> |
|             | (b) | Detail causes and effects of air pollution   | <b>05</b> |
|             | (c) | Explain pathogenesis of rheumatoid arthritis   | <b>05</b> |
| <b>Q. 6</b> | (a) | Write a note on cells involved in chronic inflammation   | <b>06</b> |
|             | (b) | Alcohol abuse causes fatty changes in liver-Discuss  | <b>05</b> |
|             | (c) | Give similarities and dissimilarities between marasmus and kwashiorkor                                     | <b>05</b> |
| <b>Q.7</b>  | (a) | Define hypersensitivity reaction; classify them and write a note on delayed type hypersensitivity reaction | <b>06</b> |
|             | (b) | How does tissue repair occur in skin   | <b>05</b> |
|             | (c) | Define necrosis. Give its types and associated morphological changes.                                      | <b>05</b> |

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