

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY****B. Pharm. - SEMESTER-3 • EXAMINATION – SUMMER -2018****Subject Code: 230005****Date: 07/05/2018****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

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|-------------|-----|---|-----------|
| <b>Q.1</b>  | (a) | Discuss the cellular and molecular mechanism of reversible and irreversible cell injury due to ischaemia. | <b>06</b> |
|             | (b) | Describe causes and pathological changes underlying atrophy.  | <b>05</b> |
|             | (c) | Write a note on tissue regeneration process.  | <b>05</b> |
| <b>Q.2</b>  | (a) | Define apoptosis. Describe causes, molecular mechanism and importance of apoptosis.                       | <b>06</b> |
|             | (b) | Discuss in detail about on Amyloidosis.   | <b>05</b> |
|             | (c) | Write a note on components of extracellular matrix.   | <b>05</b> |
| <b>Q.3</b>  | (a) | Define radiation injury. Explain mechanisms involved in radiation induced damage to the DNA of cell.      | <b>06</b> |
|             | (b) | Write a note on pathogenesis of rheumatoid arthritis.   | <b>05</b> |
|             | (c) | Write note on HLA system and its importance   | <b>05</b> |
| <b>Q.4</b>  | (a) | Enlist various hypersensitivity reactions. Discuss mechanisms involved in cell mediated immunity.         | <b>06</b> |
|             | (b) | Describe cellular events in acute inflammation. Explain chemotaxis.                                       | <b>05</b> |
|             | (c) | Write a note on wound healing process.  | <b>05</b> |
| <b>Q.5</b>  | (a) | Define autoimmunity and classify autoimmune disease. Write a note on Systemic Lupus Erythematosus.        | <b>06</b> |
|             | (b) | Describe the role of different systems in generation of plasma derived mediators.                         | <b>05</b> |
|             | (c) | Write in detail about effector mechanism of graft rejection.  | <b>05</b> |
| <b>Q. 6</b> | (a) | Discuss the cells of immune system and their function.  | <b>06</b> |
|             | (b) | Write in detail about pathogenesis of HIV infections.   | <b>05</b> |
|             | (c) | Explain pathogenesis of calcification   | <b>05</b> |
| <b>Q.7</b>  | (a) | Write about etiology of obesity. Explain its metabolic changes.   | <b>06</b> |
|             | (b) | Discuss pathogenesis of nutritional deficiency diseases.  | <b>05</b> |
|             | (c) | Write a note on therapeutic drug induced adverse reactions.   | <b>05</b> |

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