

Seat No.: _____

Enrolment No. _____

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

Subject Code: 230005

Date: 23-12-2013

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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|-------------|--|-----------|
| Q.1 | (a) Define and classify amyloidosis. Explain the pathogenesis and clinical manifestations in amyloidosis. | 06 |
| | (b) Write a note on free radical mediated cell injury. | 05 |
| | (c) Explain the terms:
1. Hypertrophy 4. Atrophy
2. Hyperplasia 5. Metaplasia
3. Dystrophic Calcification | 05 |
| Q.2 | (a) Define acute inflammation. Write in detail about cellular events occur in acute inflammation. | 06 |
| | (b) Write in detail about mechanism of autoimmunity. | 05 |
| | (c) Write a note on obesity. | 05 |
| Q.3 | (a) Define apoptosis. Write in detail about mechanism of apoptosis. | 06 |
| | (b) Describe in detail about growth factors involved in tissue repair. | 05 |
| | (c) Write a note on carbon monoxide poisoning. | 05 |
| Q.4 | (a) Write in detail about mechanism of intracellular accumulation. | 06 |
| | (b) Write a note on protein energy malnutrition. | 05 |
| | (c) Explain the terms:
1. Natural killer cell 4. T lymphocytes
2. MHC molecule 5. Central tolerance
3. Polyarteritis Nodosa | 05 |
| Q.5 | (a) Write types of nutritional deficiencies. Write metabolic changes associated with starvation. | 06 |
| | (b) Write a note on biological effects of radiation. | 05 |
| | (c) Write in detail about mechanism of tissue repair. | 05 |
| Q. 6 | (a) Classify hypersensitivity reactions. Explain the mechanism involved in the Type I (anaphylactic) hypersensitivity. | 06 |
| | (b) Discuss in detail about wound healing process. | 05 |
| | (c) Enlist chemical mediators of inflammation. Explain systemic effects of chronic inflammation. | 05 |
| Q.7 | (a) Explain the mechanisms of rejection of allografts in hosts. | 06 |
| | (b) Write a note on systemic lupus erythematosus. | 05 |
| | (c) Explain the sequential changes in irreversible cell injury due to ischaemia/hypoxia. | 05 |
