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.**

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**

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