GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – III • EXAMINATION – SUMMER • 2014

Subject Code: 230005   **Date: 12-06-2014**

Subject Name: Pathophysiology

Time: 02:30 pm - 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.**

Q.1	(a)	Define following terms: 1. Hypoplasia 4. Calcification 2. Hypertrophy 5. Steatosis 3. Autophagy 6. Lipofuscin	**06**
	(b)	Write in detail on type I and type IV hypersensitivity.	**05**
	(c)	Enlist criteria for diagnosis of obesity. Write its etiology and pathogenesis.	**05**
Q.2	(a)	Explain hypoxic and ischemic injury.	**06**
	(b)	Write in brief on pathogenesis of AIDS.	**05**
	(c)	Describe role of complement system in inflammation.	**05**
Q.3	(a)	Enumerate vascular and cellular events of acute inflammation. Explain process of phagocytosis.	**06**
	(b)	Describe mechanism of immunological tolerance.	**05**
	(c)	Explain process of scar formation.	**05**
Q.4	(a)	Enlist chemical mediators of inflammation. Write a note on cytokines.	**06**
	(b)	Differentiate process of necrosis and apoptosis.	**05**
	(c)	Write a note on granulomatous inflammation.	**05**
Q.5	(a)	Discuss role of cyclin-CDK system in regulation of cell cycle.	**06**
	(b)	Write pathogenesis and clinical manifestation of amyloidosis.	**05**
	(c)	Describe angiogenesis with its significance in wound healing.	**05**
Q. 6	(a)	Define cellular adaptation. Describe each type of adaptations.	**06**
	(b)	Describe pathogenesis of rheumatoid arthritis.	**05**
	(c)	Write causes and symptoms of kwashiorkor.	**05**
Q. 7	(a)	Differentiate following: MHC-I and MHC-II CD4 cell and CD8 cell Organ specific and systemic autoimmunity	**06**
	(b)	Explain mechanism of cell damage by radiation. Write short note on acute radiation syndrome.	**05**
	(c)	Enlist environmental pollutants. Write short note on carbon monoxide.	**05**

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