Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER – I • EXAMINATION – WINTER • 2014

Subject Code: 2210004 **Date: 03-01-2015**

Subject Name: Human Anatomy Physiology

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)**	Explain following terms 1. Vesicle mediated transport 2. Nutritional deficiency anaemia 3. Nucleus	**06**
	(b)	Draw well labeled diagram of basic structural unit of body.	**05**
	(c)	Write about nonspecific defense mechanism of body.	**05**
Q.2	**(a)**	Enumerate bones of appendicular skeleton. Note on histology of bones.	**06**
	(b)	Explain neuromuscular junction.	**05**
	(c)	Note on plasma.	**05**
Q.3	**(a)**	Give details of following 1. Mitochondria 2. Golgi apparatus 3. Endoplasmic reticulum	**06**
	(b)	Draw well labeled diagram of human heart.	**05**
	(c)	Discuss properties of cardiac smooth muscle.	**05**
Q.4	**(a)**	Write anatomy and physiology of white blood cell.	**06**
	(b)	Describe formation, circulation and function of lymph.	**05**
	(c)	Explain simple epithelial tissue.	**05**
Q.5	**(a)**	Note on cardiac output.	**06**
	(b)	Differentiate between passive and active transport.	**05**
	(c)	Give the details of conduction pathway of heart.	**05**
Q. 6	**(a)**	Draw neat and labeled diagram of synovial joint. Write various types of movement of synovial joint.	**06**
	(b)	Discuss various phases of gastric secretion.	**05**
	(c)	Note on ECG.	**05**
Q.7	**(a)**	Explain about organ of metabolism.	**06**
	(b)	Describe in detail about rheumatoid arthritis and hypertension.	**05**
	(c)	Give function of skeleton and discuss about bone marrow.	**05**

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