Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. - SEMESTER - I • EXAMINATION - WINTER 2013

Subject Code: 210007 Date: 06-01-2014 Subject Name: Human Anatomy Physiology and Health Education-I					
_			pm - 05.30 pm Total Marks: 80		
Instru			, ge ,e		
	2.	Attempt any five questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.			
Q.1		(a)	Define cardiac output and stroke volume. Explain factors affecting Cardiac output.	06	
		(b) (c)	Write a note on Reticulo-endothelial system. Draw a neat and labeled diagram of human cell.	05 05	
Q.2		(a) (b)	Enumerate clotting factors and explain the clotting process in detail. Define blood pressure. Explain the role of rennin- angiotensin system in regulation of blood pressure	06 05	
		(c)	What is feedback system? Write importance and operation of feedback system in regulation of internal environment of body.	05	
Q.3		(a)	Classify transport mechanism across cell membrane. Explain each of them with suitable examples.	06	
		(b) (c)	Write importance of plasma proteins. Describe mechanism of protein synthesis by cell organelles.	05 05	
Q.4		(a) (b) (c)	Classify tissues. Draw a labeled diagram of neuron. What is Anemia? Write briefly about various types of Anemia. Explain digestion of carbohydrate and protein at various parts of digestive system.	06 05 05	
Q.5		(a) (b) (c)	Describe composition, formation and circulation of lymph. Write a short note on ECG. Explain sliding filament mechanism with reference to muscle contraction and relaxation	06 05 05	
Q. 6		(a) (b) (c)	Explain following diseases: Angina, Osteoporosis, Ulcer Write a note on differential W.B.C. Give detailed structure of Neuromuscular junction. Briefly describe muscle action potential transmission at this junction.	06 05 05	
Q.7		(a) (b)	Explain the regulation of gastric juice secretion. Differentiate the following: i. Cardiac muscle and Smooth muscle ii. Innate and Acquired immunity	06 05	
			1	05	

(c)

Describe structure of Synovial joints. Write importance of Synovial fluid.