Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–III (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2130304 **Date: 02/06/2017**

Subject Name: Human Anatomy & Physiology

Time: 10:30 AM to 01:00 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

			MARKS
Q.1		**Short Questions**	**14**
	1	Define Homeostasis.	
	2	Give an example of Body Buffer.	
	3	Define Osmosis.	
	4	Mention the Cell Organelle that synthesizes the Proteins from amino acids.	
	5	What is the function of Heparin?	
	6	What is the function of Histamine?	
	7	Why Endocrine Glands are called Ductless Glands.	
	8	Which are the Principal ions responsible for generating Action Potential?	
	9	What is Blind spot?	
	10	Mention the function of Amylase.	
	11	Bile is secreted by _____.	
	12	Mention the function Hilum.	
	13	Which is the longest and heaviest bone of the body?	
	14	Which cavity is present in the Shoulder Joint?	
Q.2	**(a)**	Explain the generation of Action Potential.	**03**
	(b)	What is the Difference between Negative and Positive Feedback System?	**04**
	(c)	Explain the Cell structure with Neat Diagram.	**07**
		OR	
	(c)	Explain different types of Tissues.	**07**
Q.3	**(a)**	Define: Erythrocyte Count, MCHC & MCV.	**03**
	(b)	Explain the Blood Groups.	**04**
	(c)	Explain the development of Bone Tissue.	**07**
		OR	
Q.3	**(a)**	Define:Haemoglobin,MCH & PCV	**03**
	(b)	Mention the function of Autonomic Nervous system.	**04**
	(c)	Explain the Process of Haemostasis.	**07**
Q.4	**(a)**	Write a short note on Grey Matter.	**03**
	(b)	Explain the structure of Blood Vessels.	**04**
	(c)	Explain the mechanism of Hearing.	**07**
		OR	
Q.4	**(a)**	How is Cardiac output related to Stroke volume?	**03**
	(b)	Explain the structure of Axon.	**04**
	(c)	Explain the relationship between sympathetic stimulation and Blood vessel diameter.	**07**
Q.5	**(a)**	Explain the functions of Pharynx.	**03**

	(b)	Write a short note on Micturition.	**04**
	(c)	Explain the Physiology of Sight.	**07**
		OR	
Q.5	**(a)**	Define: IRV, FRC & RV.	**03**
	(b)	Explain the composition and Function of Gastric Juice.	**04**
	(c)	What is the difference between Internal and External Respiration?	**07**

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