## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-III (NEW) EXAMINATION - SUMMER 2021** 

Subject Code:3130304 Date:08/09/2021

Subject Name: Human Anatomy & Physiology-I

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.
- 4. Simple and non-programmable scientific calculators are allowed.

			Marks
Q.1	(a)	Define terms: Anterior, Posterior, Physiology	03
	<b>(b)</b>	Draw Neat labeled diagram of Cell.	04
	(c)	What is Homeostasis ??Write a short note on Homeostasis.	07
Q.2	(a)	Give Classification of Tissue.	03
	<b>(b)</b>	Explain Ribosomes, Golgi apparatus in brief.	04
	<b>(c)</b>	Draw and Explain different levels of structural Organization.	07
		OR	
	<b>(c)</b>	Describe Connective tissue in detail.	07
Q.3	(a)	What are causes of inflammation?	03
	<b>(b)</b>	Describe Main Functions of bones.	04
	<b>(c)</b>	Explain the any two functions of the skin in detail.	07
		OR	
Q.3	(a)	Draw the general structure of a long bone.	03
	<b>(b)</b>	Enlist five types of bones and give an example of each.	04
	<b>(c)</b>	Describe the structure of the vertebral column.	07
Q.4	(a)	Define: Flexion, Extension	03
	<b>(b)</b>	State the different types of synovial joints	04
	<b>(c)</b>	Explain cardiac conduction system with proper diagram.	07
		OR	
Q.4	(a)	Define: artery, Vein, Capillaries	03
	<b>(b)</b>	Explain heart size, location and position.	04
	<b>(c)</b>	Write short note on pulmonary circulation with proper diagram.	07
Q.5	(a)	Describe functions of blood.	03
<b>V.</b>	(b)	Define: Tidal Volume, Inspiratory Reserve Volume.	04
	(c)	Explain mechanism of External Respiration and Internal Respiration in detail.	07
	(0)	OR	07
Q.5	(a)	Give the brief idea about ICF and ECF.	03
~·-	(b)	Give brief idea about: haemoglobin, Anaemia	04
	(c)	Explain Cycle of respiration.	07
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