

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– III (New) EXAMINATION – WINTER 2019****Subject Code: 2130304****Date: 30/11/2019****Subject Name: Human Anatomy & Physiology****Time: 02:30 PM TO 05:00 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	(a) Explain Structural Organization in brief.	03
	(b) Define: Anatomy, Physiology, Superior, Inferior	04
	(c) Draw the figure of Cell and Explain its organelles.	07
Q.2	(a) Explain functions of blood.	03
	(b) Describe Homeostasis.	04
	(c) Write a short note on Blood Group.	07
	OR	
	(c) Discuss the functions and formation of the different types of white blood cell.	07
Q.3	(a) Define: Artery, Vein, Capillaries	03
	(b) Draw Neat labelled diagram of Human Heart.	04
	(c) Explain Cardiac Conduction System.	07
	OR	
Q.3	(a) Draw Anatomy of Respiratory System.	03
	(b) Explain systemic circulation of Cardiac system.	04
	(c) Write short note : chambers of the heart, valves of the heart	07
Q.4	(a) Give Classification of Tissues.	03
	(b) Define: Tidal Volume, Inspiratory Reserve Volume	04
	(c) Explain Transport mechanism of O ₂ & Co ₂ in blood Stream.	07
	OR	
Q.4	(a) List the functions of cerebrospinal fluid.	03
	(b) List types of Joints. Describe main synovial joints of the limbs in brief.	04
	(c) Explain the relationship between sympathetic stimulation and Blood vessel diameter.	07
Q.5	(a) Draw the figure of Biliary Tract.	03
	(b) Draw neat labelled diagram of Human Ear.	04
	(c) Explain the Physiology of Vision.	07
	OR	
Q.5	(a) Draw neat labeled Diagram of Kidney.	03
	(b) Enlist various organ of digestive system with their role in digestive process.	04
	(c) Discuss Physiology of urine formation with diagrams.	07
