

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM - SEMESTER- 1 EXAMINATION – WINTER -2019**

**Subject Code: 2210004****Date: 07-01-2020****Subject Name: Human Anatomy Physiology - I****Time: 10:30 AM TO 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.

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|------------|---|-----------|
| <b>Q.1</b> | (a) What is Homeostasis? Write in detail about Feedback mechanism.  | <b>06</b> |
|            | (b) Draw a figure of Neuron. Write down various types of neuron.  | <b>05</b> |
|            | (c) Classify various types of Joints.   | <b>05</b> |
|            |   |           |
| <b>Q.2</b> | (a) Short note on Physiology of Muscle contraction.   | <b>06</b> |
|            | (b) Explain in detail Function of Blood.  | <b>05</b> |
|            | (c) Define Cardiac output. Write in detail factor affecting cardiac output.   | <b>05</b> |
|            |   |           |
| <b>Q.3</b> | (a) Explain in detail Physiology of Digestion and Absorption.   | <b>06</b> |
|            | (b) Write down the Properties of Cardiac muscle.  | <b>05</b> |
|            | (c) Discuss in detail about Anemia.   | <b>05</b> |
|            |   |           |
| <b>Q.4</b> | (a) Discuss in detail function of Liver.  | <b>06</b> |
|            | (b) Write a note on Protein Synthesis.  | <b>05</b> |
|            | (c) Explain in detail Homeostasis of Blood Coagulation.   | <b>05</b> |
|            |   |           |
| <b>Q.5</b> | (a) Classify Connective tissue. Write in detail about it.   | <b>06</b> |
|            | (b) What is Blood Pressure? Write down method for measurement of Blood Pressure.                                    | <b>05</b> |
|            | (c) Define Immunity. Differentiate Active and Passive Immunity.   | <b>05</b> |
|            |   |           |
| <b>Q.6</b> | (a) What is RAAS? Write in detail Importance of it.   | <b>06</b> |
|            | (b) Explain in detail Neuromuscular Junction.   | <b>05</b> |
|            | (c) 1. Comment: Mitochondria is known as Power house of the cell.<br>2. Differentiate Active and Passive Transport. | <b>05</b> |
|            |   |           |
| <b>Q.7</b> | (a) Explain Structure, Composition and function of Bone.  | <b>06</b> |
|            | (b) Write in detail about Anatomy and Physiology of Spleen.   | <b>05</b> |
|            | (c) Define the following term. (Any Five)   | <b>05</b> |
|            | 1. Osteoarthritis                      2. Thalassemia                      3. Gastritis                             |           |
|            | 4. Adaptive immunity                      5. Synovial joint                      6. Congestive heart failure        |           |