

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Ph. - SEMESTER-I • EXAMINATION – SUMMER -2022**

**Subject Code: BP101TP****Date: 02/09/2022****Subject Name: Human Anatomy and Physiology-I****Time: 10:30AM TO 01:30PM****Total Marks: 80****Instructions:**

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

|            |   |           |
|------------|---|-----------|
| <b>Q.1</b> | (a) Define Homeostasis and describe in detail negative feedback mechanism                                   | <b>06</b> |
|            | (b) Differentiate sympathetic and parasympathetic nervous system  | <b>05</b> |
|            | (c) Draw and label the diagram of Heart   | <b>05</b> |
| <b>Q.2</b> | (a) Describe physiology of muscle contraction   | <b>06</b> |
|            | (b) Draw and label the diagram of eye   | <b>05</b> |
|            | (c) Define the following terms: 1) Phagocytosis; 2) Pinocytosis; 3) Exocytosis; 4) Transcytosis; 5) Osmosis | <b>05</b> |
| <b>Q.3</b> | (a) Write a note on blood clotting  | <b>06</b> |
|            | (b) Describe in detail regulation of blood pressure   | <b>05</b> |
|            | (c) Enlist joints of the skeleton. Discuss types of synovial joints   | <b>05</b> |
| <b>Q.4</b> | (a) Write a short-note on cardiac cycle   | <b>06</b> |
|            | (b) Discuss types of joints movements and its articulation  | <b>05</b> |
|            | (c) Write a note on blood-group   | <b>05</b> |
| <b>Q.5</b> | (a) Write a note on cell-cycle  | <b>06</b> |
|            | (b) Describe structure, circulation and functions of spleen   | <b>05</b> |
|            | (c) Discuss in detail types of anemia and its diagnosis   | <b>05</b> |
| <b>Q.6</b> | (a) Write a note on electrocardiogram   | <b>06</b> |
|            | (b) Draw and label the diagram of skin  | <b>05</b> |
|            | (c) Describe type, origin and functions of cranial nerves   | <b>05</b> |
| <b>Q.7</b> | (a) Explain the given terminologies: 1) Angina Pectoris   | <b>06</b> |
|            | 2) Congestive cardiac failure   |           |
|            | 3) Palpitation  |           |
|            | 4) Haemorrhage  |           |
|            | 5) Ductus Arteriosus  |           |
|            | 6) Cardiac arrhythmia   |           |
|            | (b) Describe physiology of hearing.   | <b>05</b> |
|            | (c) Classify types of tissue and explain epithelial tissue in detail  | <b>05</b> |

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