

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. Pharm. - SEMESTER-1 • EXAMINATION – SUMMER -2018**

**Subject Code: 210007****Date: 08/05/2018****Subject Name: Human Anatomy Physiology And Health Education - I****Time: 02:30 PM TO 05:30 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) | Classify Epithelial Tissue? Add a note on Simple Epithelium.                                                 | <b>06</b> |
|             | (b) | Describe mechanism of protein synthesis by cell organelles.                                                  | <b>05</b> |
|             | (c) | Describe process of digestion and absorption of carbohydrates.                                               | <b>05</b> |
| <b>Q.2</b>  | (a) | Classify Joints with example? Add a note on Synovial Joint.                                                  | <b>06</b> |
|             | (b) | Write on types and functions of WBC.                                                                         | <b>05</b> |
|             | (c) | Describe anatomy and physiology of liver.                                                                    | <b>05</b> |
| <b>Q.3</b>  | (a) | What is anemia? Explain various anemia in detail.                                                            | <b>06</b> |
|             | (b) | Give the composition and formation of Lymph and discuss its functions.                                       | <b>05</b> |
|             | (c) | Write a note on: Blood groups and its significance.                                                          | <b>05</b> |
| <b>Q.4</b>  | (a) | Draw a labeled diagram of neuromuscular junction. Write a detailed note on physiology of muscle contraction. | <b>06</b> |
|             | (b) | Explain regulation of gastric secretion and motility.                                                        | <b>05</b> |
|             | (c) | Define blood pressure. Explain the role of rennin- angiotensin system in regulation of blood pressure.       | <b>05</b> |
| <b>Q.5</b>  | (a) | Draw neat and well labeled diagram of heart. Explain in detail the conduction system of heart.               | <b>06</b> |
|             | (b) | Define immunity. Describe the role of B-lymphocyte in immunity.                                              | <b>05</b> |
|             | (c) | Write a short note on ECG.                                                                                   | <b>05</b> |
| <b>Q. 6</b> | (a) | Enumerate clotting factors and explain the clotting process in detail.                                       | <b>06</b> |
|             | (b) | What is cardiac output? Describe the factors affecting cardiac output.                                       | <b>05</b> |
|             | (c) | Describe composition and process of bone formation.                                                          | <b>05</b> |
| <b>Q.7</b>  | (a) | Classify transport mechanism across cell membrane. Explain each of them with suitable examples.              | <b>06</b> |
|             | (b) | Write a note on reticulo-endothelial system.                                                                 | <b>05</b> |
|             | (c) | Draw a labeled diagram of neuron.                                                                            | <b>05</b> |

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