

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. Pharm. – SEMESTER – I • EXAMINATION – SUMMER 2013**

**Subject Code: 210001****Date: 17-05-2013****Subject Name: Anatomy Physiology and Health Education****Time: 02.30 pm - 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) Define cell. Explain in detail structure and function of cell membrane.                         | <b>06</b> |
|             | (b) Explain in brief about mechanism of blood clotting.   | <b>05</b> |
|             | (c) Write in brief about mitochondria.  | <b>05</b> |
| <b>Q.2</b>  | (a) Classify tissue. Discuss in detail about structure and function of epithelial tissues.          | <b>06</b> |
|             | (b) Explain in brief about functions of liver.  | <b>05</b> |
|             | (c) Differentiate between   | <b>05</b> |
|             | (i) Active transport and Passive transport  |           |
|             | (ii) Skeletal muscle and Cardiac muscle   |           |
| <b>Q.3</b>  | (a) Classify WBCs. Write functions of WBCs in detail.   | <b>06</b> |
|             | (b) Explain in brief about spleen.  | <b>05</b> |
|             | (c) Write a note on types of joints.  | <b>05</b> |
| <b>Q.4</b>  | (a) What is Neuron? Explain in detail about physiology of muscle contraction with suitable diagram. | <b>06</b> |
|             | (b) Explain briefly various types of anaemia.   | <b>05</b> |
|             | (c) Write a short note on various phases cell cycle.  | <b>05</b> |
| <b>Q.5</b>  | (a) Draw a labeled diagram of digestive system. Write a note on phases of gastric acid secretion.   | <b>06</b> |
|             | (b) Discuss in detail about life cycle of RBC.  | <b>05</b> |
|             | (c) Write a note on composition and function of Lymph.  | <b>05</b> |
| <b>Q. 6</b> | (a) What is immunity? Write in brief about innate and adaptive immunity.                            | <b>06</b> |
|             | (b) Write composition and functions of gastric juice.   | <b>05</b> |
|             | (c) Write a brief note on reticulo-endothelial system.  | <b>05</b> |
| <b>Q.7</b>  | (a) Define autotoxins. Discuss in brief about role of histamine in allergy and inflammation.        | <b>06</b> |
|             | (b) Describe structure and composition of bone.   | <b>05</b> |
|             | (c) Write a note on Prostaglandins.   | <b>05</b> |

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