

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. Pharm. – SEMESTER – I • EXAMINATION – SUMMER • 2014**

**Subject Code: 210001**

**Date: 13-06-2014**

**Subject Name: Anatomy Physiology and Health Education - I**

**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)   | Explain the basic structure of eukaryotic cell with schematic diagram.  | <b>06</b> |
|             | (b)   | Write a note on nervous tissue with schematic diagram.  | <b>05</b> |
|             | (c)   | Define the words “anatomy” and “physiology”. Add a note on structural and functional organization of various organ systems. | <b>05</b> |
| <b>Q.2</b>  | (a)   | Write a note on general functions of blood  | <b>06</b> |
|             | (b)   | Write a note on blood groups according to ABO system. Explain the term “universal recipient” and “universal donor”.         | <b>05</b> |
|             | (c)   | Explain the mechanism of blood clotting   | <b>05</b> |
| <b>Q.3</b>  | (a)   | Write a note on epithelial tissue   | <b>06</b> |
|             | (b)   | Write a note on mitochondria.   | <b>05</b> |
|             | (c)   | Describe following terms  | <b>05</b> |
|             | (i)   | Leucocytosis  |           |
|             | (ii)  | Leukaemia   |           |
|             | (iii) | Leucopenia  |           |
|             | (iv)  | Polycythemia  |           |
|             | (v)   | Pancytopenia  |           |
| <b>Q.4</b>  | (a)   | Explain the functions of bile juice. Describe the term “Cholecystitis”  | <b>06</b> |
|             | (b)   | Write a short note on Cell cycle.   | <b>05</b> |
|             | (c)   | Write in brief about spleen.  | <b>05</b> |
| <b>Q.5</b>  | (a)   | Write a note on functions of liver  | <b>06</b> |
|             | (b)   | Enumerate various anatomical structures of gastro-intestinal tract. Explain the functions of stomach.                       | <b>05</b> |
|             | (c)   | Write a note on salivary glands.  | <b>05</b> |
| <b>Q. 6</b> | (a)   | Explain the term “immunity”. Write a note on acquired immunity  | <b>06</b> |
|             | (b)   | Write a note on composition and functions of lymph.   | <b>05</b> |
|             | (c)   | Differentiate various types of muscles.   | <b>05</b> |
| <b>Q.7</b>  | (a)   | Explain the physiology of muscle contraction with diagram   | <b>06</b> |
|             | (b)   | Write a note on synovial joint with diagram   | <b>05</b> |
|             | (c)   | Write a note on various transport mechanisms across the cell membrane   | <b>05</b> |

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