

**GUJARAT TECHNOLOGICAL UNIVERSITY****B. Pharm. - SEMESTER-I • EXAMINATION – SUMMER-2016****Subject Code: 210001****Date: 30/5/2016****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) | Write a short note on cell cycle.   | <b>06</b> |
|             | (b) | Draw lablled diagram of a typical human cell.   | <b>05</b> |
|             | (c) | Differentiate between   | <b>05</b> |
|             |     | 1. Skeletal and Cardiac muscle  |           |
|             |     | 2. Active transport and Passive transport   |           |
| <b>Q.2</b>  | (a) | What are different types of epithelial tissues and describe them in detail.                 | <b>06</b> |
|             | (b) | Write a short note on types of joints.  | <b>05</b> |
|             | (c) | Write a short on physiological properties of skeletal muscle.                               | <b>05</b> |
| <b>Q.3</b>  | (a) | Explain physiology of muscle contraction along with molecular structure of skeletal muscle. | <b>06</b> |
|             | (b) | Classify WBCs. Discuss function of WBCs.  | <b>05</b> |
|             | (c) | Discuss functions of Blood.   | <b>05</b> |
| <b>Q.4</b>  | (a) | Explain in detail about blood clotting process.   | <b>06</b> |
|             | (b) | Write a note on blood groups  | <b>05</b> |
|             | (c) | What is immunity? Differentiate active and passive immunity.                                | <b>05</b> |
| <b>Q.5</b>  | (a) | Explain the following term  | <b>06</b> |
|             |     | 1. Nucleus  |           |
|             |     | 2. Mitochondria   |           |
|             |     | 3. Lysosomes  |           |
|             | (b) | Draw a detailed structure of Digestive system of human body.                                | <b>05</b> |
|             | (c) | Describe anatomy and physiology of the spleen.  | <b>05</b> |
| <b>Q. 6</b> | (a) | Describe following terminologies:   | <b>06</b> |
|             |     | 1. Peptic ulcer disease   |           |
|             |     | 2. Arthritis  |           |
|             |     | 3. Anemia   |           |
|             | (b) | Write a short note on anatomy and physiology of small Intestine.                            | <b>05</b> |
|             | (c) | Describe eicosanoids.   | <b>05</b> |
| <b>Q.7</b>  | (a) | Write a short note on liver.  | <b>06</b> |
|             | (b) | Discuss physiological actions of Histamine and 5 Hydroxytryptamine.                         | <b>05</b> |
|             | (c) | Discuss formation, composition and functions of lymph.                                      | <b>05</b> |

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