

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

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

# GUJARAT TECHNOLOGICAL UNIVERSITY

**B. Pharm. – SEMESTER – I • EXAMINATION – WINTER 2013**

**Subject Code: 210001**

**Date: 06-01-2014**

**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) Describe changes during different phases of cell cycle with suitable diagrams.                      | <b>06</b> |
|             | (b) Explain mechanism of Blood clotting.  | <b>05</b> |
|             | (c) Write about the secretions of Pancreas.   | <b>05</b> |
| <b>Q.2</b>  | (a) Give a detailed account on: Physiology of muscle contraction.                                       | <b>06</b> |
|             | (b) Write about the development of bone and explain how bone growth is regulated.                       | <b>05</b> |
|             | (c) Differentiate (i) Cardiac muscles and Skeletal muscles (ii) Active and Passive transport processes. | <b>05</b> |
| <b>Q.3</b>  | (a) Define Autocoids and explain the role of histamine allergy.   | <b>06</b> |
|             | (b) Classify Eicosanoids. Write a note on Prostaglandins.   | <b>05</b> |
|             | (c) Write about composition and function of gastric juice.  | <b>05</b> |
| <b>Q.4</b>  | (a) Enumerate components of blood. Describe erythropoiesis.   | <b>06</b> |
|             | (b) Justify: Mitochondria are energy house of cell whereas lysosomes are suicidal bags.                 | <b>05</b> |
|             | (c) Write a short note on types of joints.  | <b>05</b> |
| <b>Q.5</b>  | (a) Differentiate Epithelial tissues and Connective tissues. Describe in detail the connective tissues. | <b>06</b> |
|             | (b) Enlist types of immunity. Explain acquired immunity.  | <b>05</b> |
|             | (c) Write composition and function of Lymph.  | <b>05</b> |
| <b>Q. 6</b> | (a) Draw labeled diagram of digestive system and enumerate function of each labeled parts.              | <b>06</b> |
|             | (b) Explain role of leukotrienes in inflammation.   | <b>05</b> |
|             | (c) Write a short note on Liver.  | <b>05</b> |
| <b>Q.7</b>  | (a) Write biosynthesis of serotonin (5-HT) and action of 5-HT on blood vessels.                         | <b>06</b> |
|             | (b) Explain the terms: Rheumatoid arthritis, panceatitis, Crenation, leucocytosis, roulex formation     | <b>05</b> |
|             | (c) Enumerate bones of skull.   | <b>05</b> |

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