

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

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

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

**Subject Code: 2210004**

**Date: 13-06-2014**

**Subject Name: Human Anatomy Physiology**

**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 following diseases: Cardiac arrhythmias, Leukemia, Hypertension.                            | <b>06</b> |
|             | (b) | Discuss composition and function of gastric juice.  | <b>05</b> |
|             | (c) | Write a note on Nervous tissue.   | <b>05</b> |
| <b>Q.2</b>  | (a) | Enlist different types of immunity. Explain acquired immunity.                                      | <b>06</b> |
|             | (b) | Classify transport mechanism across cell membrane. Explain each of them with suitable examples.     | <b>05</b> |
|             | (c) | What is Blood Pressure? Discuss its significance and methods of measurement.                        | <b>05</b> |
| <b>Q.3</b>  | (a) | What are the various phases of Cell cycle? Explain in detail Mitotic phase.                         | <b>06</b> |
|             | (b) | Define anemia? Discuss the different types of anemia.   | <b>05</b> |
|             | (c) | Draw labeled diagram of digestive system and enumerate functions of each of the labeled parts.      | <b>05</b> |
| <b>Q.4</b>  | (a) | Discuss different types of Synovial joints with appropriate examples for each type.                 | <b>06</b> |
|             | (b) | Explain the process of erythropoiesis and role of erythropoietin.                                   | <b>05</b> |
|             | (c) | Write a short note on spleen.   | <b>05</b> |
| <b>Q.5</b>  | (a) | Describe the structure of Cell membrane with appropriate diagram. Give functions of Cell membrane.  | <b>06</b> |
|             | (b) | Discuss the Renin Angiotensin System.   | <b>05</b> |
|             | (c) | Write a short note on ECG.  | <b>05</b> |
| <b>Q. 6</b> | (a) | What is blood? Enumerate various components and functions of blood.                                 | <b>06</b> |
|             | (b) | Differentiate epithelial tissues and connective tissues. Describe in detail the connective tissues. | <b>05</b> |
|             | (c) | Write a note on coronary and pulmonary circulation.   | <b>05</b> |
| <b>Q.7</b>  | (a) | Enumerate various clotting factors and explain in detail mechanism of coagulation.                  | <b>06</b> |
|             | (b) | Explain the Physiology of Muscle contraction.   | <b>05</b> |
|             | (c) | Write composition and function of Lymph.  | <b>05</b> |

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