

GUJARAT TECHNOLOGICAL UNIVERSITY**D.Ph. - SEMESTER- I • EXAMINATION – SUMMER 2013****Subject Code: 410005****Date: 20-05-2013****Subject Name: Human Anatomy and Physiology****Time: 10.30 am - 01.30 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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| Q.1 | (a) Define and classify tissues. Explain nervous tissue with diagram. | 06 |
| | (b) Draw a labeled diagram of cell. Discuss any two organelles of cell. | 05 |
| | (c) Write functions and composition of blood. | 05 |
| Q.2 | (a) Write a detailed note on red blood cells and hemoglobin. | 06 |
| | (b) Discuss anatomy and physiology of Liver. | 05 |
| | (c) Classify white blood cells. Explain their functions. | 05 |
| Q.3 | (a) Describe anatomy and physiology of thyroid gland. | 06 |
| | (b) Give an account of hormones, their functions and disorders of anterior pituitary gland. | 05 |
| | (c) Explain anatomy of human heart along with labeled diagram. | 05 |
| Q.4 | (a) Write a note on medulla oblongata and hypothalamus. | 06 |
| | (b) Write about CSF and cerebellum. | 05 |
| | (c) Explain the phenomenon of internal respiration. | 05 |
| Q.5 | (a) Discuss structure and functions of lymph node. | 06 |
| | (b) Write a note on menstrual cycle. | 05 |
| | (c) Draw a labeled diagram of digestive system. | 05 |
| Q. 6 | (a) Draw a labeled diagram of human eye. Add a note on cataract and glaucoma. | 06 |
| | (b) Explain physiology of hearing. | 05 |
| | (c) Enlist parts of nephron. Explain physiology of urine formation. | 05 |
| Q.7 | (a) Describe fully the concept of blood pressure. | 06 |
| | (b) Explain physiology of muscle contraction. | 05 |
| | (c) Classify various types of joints made by bones. Discuss any one type of them. | 05 |
