

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
D. Pharm. – SEMESTER – I • EXAMINATION – WINTER • 2014

Subject Code: 410005

Date: 02-01-2015

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) Write characteristics of hormones. Enlist various endocrine glands and their hormonal secretions in the body. | 06 |
| | (b) Draw a labeled diagram of male reproductive system. | 05 |
| | (c) Discuss the anatomy of the urinary system. Write functions of kidney. | 05 |
| Q.2 | (a) Draw a labeled diagram of digestive system. | 06 |
| | (b) Discuss the physiology of hearing. | 05 |
| | (c) Write a note on anatomy and functions of thyroid gland. | 05 |
| Q.3 | (a) Give the normal range of heart rate in humans. Enlist the factors affecting heart rate. | 06 |
| | (b) Write a short note on blood groups. | 05 |
| | (c) Describe composition, formation and functions of lymph. | 05 |
| Q.4 | (a) Write a note on ECG. | 06 |
| | (b) Draw a labeled diagram of cross-section of eye-ball. | 05 |
| | (c) Write functions of hypothalamus and cerebrum. | 05 |
| Q.5 | (a) Discuss the functions of liver. | 06 |
| | (b) Write a note on mechanism of respiration. | 05 |
| | (c) Explain the following terms in brief:
(I) Vital Capacity (II) Color blindness (III) Anaemia
(IV) Hypertension (V) Diabetes | 05 |
| Q. 6 | (a) What is reflex action? Write a note one reflex arc. | 06 |
| | (b) Write in brief the physiology of muscle contraction. | 05 |
| | (c) Classify different tissues. Draw the labeled diagram of a typical neuron. | 05 |
| Q.7 | (a) Discuss different types of joints in the body. | 08 |
| | (b) Illustrate the process of hemopoiesis. | 08 |
