

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

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

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**Diploma Pharmacy (First Year) - Examination –May/June- 2011**

**Subject code: 410005**

**Subject Name: Human Anatomy and Physiology**

**Date: 31/05/2011**

**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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|-------------|------------|--|-----------|
| <b>Q.1</b>  | <b>(a)</b> | Draw and label diagram of Nephron. Discuss the physiology of urine formation.  | <b>06</b> |
|             | <b>(b)</b> | Classify tissues. Write a note on Nervous Tissue.  | <b>05</b> |
|             | <b>(c)</b> | Write composition and functions of lymph.  | <b>05</b> |
| <b>Q.2</b>  | <b>(a)</b> | Draw and label diagram of cross section of eyeball. Write a note on Physiology of Vision.  | <b>06</b> |
|             | <b>(b)</b> | Discuss salivary glands and its functions.   | <b>05</b> |
|             | <b>(c)</b> | Give Physiological actions of Glucocorticoids.   | <b>05</b> |
| <b>Q.3</b>  | <b>(a)</b> | Describe composition and functions of blood.   | <b>06</b> |
|             | <b>(b)</b> | Draw and label diagram of Male Reproductive System and write functions of Testosterone.  | <b>05</b> |
|             | <b>(c)</b> | Describe methods for measurement of Blood Pressure.  | <b>05</b> |
| <b>Q.4</b>  | <b>(a)</b> | Explain digestion of food in Stomach and Intestine.  | <b>06</b> |
|             | <b>(b)</b> | Write functions of Hypothalamus and Medulla Oblongata.   | <b>05</b> |
|             | <b>(c)</b> | Classify types of joints and write a note on synovial joint.   | <b>05</b> |
| <b>Q.5</b>  | <b>(a)</b> | Enlist various clotting factors and describe in detail mechanism of clotting.  | <b>06</b> |
|             | <b>(b)</b> | Differentiate the following.<br>(1) Sympathetic and Parasympathetic Nervous System<br>(2) Skeletal Muscle and Cardiac Muscle           | <b>05</b> |
|             | <b>(c)</b> | Write a note on ECG and its significance.  | <b>05</b> |
| <b>Q. 6</b> | <b>(a)</b> | Explain Physiology of Muscle Contraction.  | <b>06</b> |
|             | <b>(b)</b> | Write a short note on Cardiac Cycle.   | <b>05</b> |
|             | <b>(c)</b> | Describe synthesis, storage, transport and functions of Thyroid Hormones.  | <b>05</b> |
| <b>Q.7</b>  | <b>(a)</b> | Discuss the following terms.<br>(1) Tidal Volume      (2) Asthma      (3) Calculi<br>(4) Peptic Ulcer      (5) Oedema      (6) Anaemia | <b>06</b> |
|             | <b>(b)</b> | Draw and label diagram of a Cell and write a note on Mitochondria.   | <b>05</b> |
|             | <b>(c)</b> | Give structure and functions of Skin.  | <b>05</b> |

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