

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Ph SEM-II Examination- Dec.-2011**

**Subject code: 220004**

**Date: 20/12/2011**

**Subject Name: Anatomy Physiology and Health Education-II**

**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.

- |             |  |           |
|-------------|--|-----------|
| <b>Q.1</b>  | (a) Draw and label a nephron. Explain the counter current multiplier system                      | <b>06</b> |
|             | (b) Discuss -Prevention is better than cure.   | <b>05</b> |
|             | (c) Define Vital capacity, Myopia, Colour blindness, Metabolic acidosis, Endemic.                | <b>05</b> |
| <b>Q.2</b>  | (a) Draw a labeled diagram of a neuron. Explain electrical transmission in the nerve.            | <b>06</b> |
|             | (b) Explain clinical symptoms, spread and prevention of typhoid fever.                           | <b>05</b> |
|             | (c) Define menstruation and explain its physiology.  | <b>05</b> |
| <b>Q.3</b>  | (a) Enumerate air borne diseases. How are they transmitted and state their immunization schedule | <b>06</b> |
|             | (b) Discuss first aid treatment of shock and snake bite  | <b>05</b> |
|             | (c) Explain the physiology of hearing, balance and equilibrium                                   | <b>05</b> |
| <b>Q.4</b>  | (a) Classify endocrine glands and state their functions.   | <b>06</b> |
|             | (b) Signify the terms-; Neurotransmitters, Placenta  | <b>05</b> |
|             | (c) Define reflex action. Explain propagation through reflex arc, classifying its types.         | <b>05</b> |
| <b>Q.5</b>  | (a) Define respiration. Explain in detail mechanism of internal respiration                      | <b>06</b> |
|             | (b) Discuss the feedback mechanism regulating hormone secretion                                  | <b>05</b> |
|             | (c) Enumerate cranial nerves stating their functions   | <b>05</b> |
| <b>Q. 6</b> | (a) Detail biosynthesis, transport and metabolism of adrenocortical hormones                     | <b>06</b> |
|             | (b) Autonomic Nervous System balances physiological functions- Discuss.                          | <b>05</b> |
|             | (c) Explain the terms- Calculi; Gerontology  | <b>05</b> |
| <b>Q.7</b>  | (a) Explain the following terms- Cretinism; Addison's disease; Gestational diabetes              | <b>06</b> |
|             | (b) Detail anatomy of the cerebrum stating the respective function.                              | <b>05</b> |
|             | (c) Draw and label male reproductive system. Explain the process of spermatogenesis              | <b>05</b> |

\*\*\*\*\*