



**DHH-003-012208**

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

**M. Sc. (Sem. II) (CBCS) (Biochemistry) Examination**

**May / June – 2015**

**BC - CBC - 5 : Human Physiology & Endocrinology**

**Faculty Code : 003**

**Subject Code : 012208**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

- Instructions:**
1. Attempt all questions.
  2. Make suitable assumptions wherever necessary.
  3. Figures on the right indicate full marks.

**Q.1 Answer briefly any seven of the following questions** [14]

1. Write about the respiratory surface.
2. Write the role of breathing in maintenance of blood pH.
3. What do you mean by pressure filtration?
4. Classify the nerves on the basis of functions.
5. Write the functional role of glucagon.
6. What will be the effect on urine formation and composition when ADH level decreases than the required normal level?
7. Draw a labeled diagram showing the structure of sarcomere.
8. Write about the functional role of troponin.
9. How the secretion of gastric juice is taking place?
10. Define synapse and role of neurotransmitters.

**Q.2 Answer any two of the following questions** [14]

1. Explain nephron tubules with appropriate diagram.
2. Describe the structural and functional aspects of human digestive tract.
3. Write a note on generation of action potential in a nerve cell.

**Q.3**

1. Explain muscle contraction with diagram. [7]
2. How oxygen and carbon dioxide exchange during external and internal respiration? [7]

**OR**

**Q.3**

1. Write a note on hormones of pituitary gland [7]
2. Write a note on the inter relationship between pancreas and liver [7]

**Q.4**

1. Describe the process of control of breathing. [7]
2. Explain about energetic and metabolic acidosis after exercise. [7]

**Q.5 Answer any two of the following**

[14]

1. Explain the structure of eye and mechanism of vision
  2. Describe hormonal regulation of process of human digestion.
  3. Briefly explain the effects of hormones of adrenal cortex.
  4. Write a detailed note on digestion and absorption of fats.
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