



NCC-003-012208 Seat No. _____

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

April / May - 2017

BC - CBC - 5 : Human Physiology & Endocrinology
(Old Course)

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.

1 Answer briefly any seven of the following questions : **14**

- (1) What is chloride shift?
- (2) What effect in pH of blood is observed because of high CO_2 concentration in blood ?
- (3) What is glomerulus?
- (4) Classify the nerves on the basis of functions.
- (5) Write two differences between the effect of insulin and glucagon.
- (6) What will be the effect on urine formation and composition when ADH level decreases than the required normal level?
- (7) Write the functions of tropomyosin and troponin.
- (8) Write about the functional role of myosin.
- (9) How the secretion of gastric juice is taking place?.
- (10) Write two differences between neurotransmitters and hormones

- 2** Answer any **two** of the following questions : **14**
- (1) Explain with diagram: Structure of Nephron.
 - (2) Write a note on accessory organs of human digestive system.
 - (3) Write a note on generation of action potential in a nerve cell.
- 3** (1) Write about the process of muscle contraction. **7**
- (2) Explain with diagram about the oxygen transport by hemoglobin. **7**
- OR**
- 3** (1) Write a note on hormones of posterior pituitary gland. **7**
- (2) Write a note on the inter relationship between pancreas and liver. **7**
- 4** (1) Describe the process of control of breathing. **7**
- (2) Explain the physiological changes observed because of physical exercise. **7**
- 5** Answer any two of the following : **14**
- (1) Write about the structure of eye with suitable diagram.
 - (2) Describe the role of hormones in the digestion process.
 - (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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