



NCC-1603120102020500 Seat No. _____
M. Sc. (Biochemistry) (Sem. II) (CBCS) Examination
April / May - 2017
CBC-5 : Human Physiology & Endocrinology
(New Course)

Time : 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) Write anatomical classification of respiratory system.
- (2) Write down structural component of alveoli.
- (3) State the significance of zymogen secretion during digestion.
- (4) What is pericardium? Discuss briefly
- (5) What will be the effect on urine formation and composition when ADH level decreases than the required normal level?
- (6) Differentiate: Efferent and afferent arteries.
- (7) Write about the functional role of myosin.
- (8) Write brief introduction about motor unit.
- (9) Write two differences between neurotransmitters and hormones.
- (10) Why glucocorticoids are given for the prevention of graft rejection?

2 Answer any **two** of the following questions : **14**

- (1) Discuss in detail: pharynx with structure.
- (2) Factors that affect the affinity of hemoglobin and oxygen
- (3) Draw neat and clean diagram of an eye and explain physiology of vision.

3 (1) Explain in detail about the role of mouth, teeth and tongue in digestive system with suitable diagram. **7**

(2) Discuss the anatomy of four chambers of heart. **7**

OR

3 (1) Describe the Muscle protein and give the structure of sarcomere. **7**

(2) Draw and briefly discuss about the different waves of electrocardiogram. **7**

4 (1) Discus the mechanism for formation of dilute urine. **7**

(2) Describe the role of hormones in the digestion process. **7**

5 Answer any **two** of the following : **14**

(1) Explain synthesis and secretion of insulin

(2) Write down hormonal regulation of blood pressure

(3) Write a note on effects of testosterone in males

(4) Discuss the changes in pressure and volume during cardiac cycle.
