

B.SC. DEGREE END SEMESTER EXAMINATION OCTOBER 2016**SEMESTER – 5: ZOOLOGY (CORE COURSE)****COURSE: U5CRZ008 – BIOCHEMISTRY, HUMAN PHYSIOLOGY AND ENDOCRINOLOGY**

Time: Three Hours

Max. Marks: 60

PART A*Answer ALL questions. Each question carries 1 mark.*

1. What are polysaccharides? Give one example.
2. What is gluconeogenesis?
3. What is β -Oxidation?
4. What is a balanced diet?
5. What is hypoxia?
6. Explain neurotransmitters with example.
7. Which are the hormones secreted by thyroid gland?
8. Which are the proteins associated with actin filaments?

(1 x 8 = 8)

PART B*Answer ANY Six questions. Each question carries 2 marks.*

9. Why is Carbon Monoxide poisoning considered dangerous?
10. What is the significance of uricotelism in animal kingdom?
11. Why peptide hormone receptors are seen on the surface of cells while steroid hormone receptors are seen in cytoplasm?
12. What is the difference between Aldoses and Ketoses? Give examples.
13. What are essential aminoacids?
14. Why is pineal gland considered as biological clock of the body?
15. What is dope test?
16. What is all-or-none law in neurophysiology?

(2 x 6 = 12)

PART C*Answer ANY Four questions. Each question carries 4 marks.*

17. What is the difference Red muscle and White muscle?
18. In a synapse, action potentials are always transmitted from an axon to a dendron. Why is it never transmitted from a dendron to an axon?

19. Explain Chloride shift associated with the transport of Carbon dioxide in blood?
20. How is gluconeogenesis important in homeostasis of body?
21. Explain the various structural levels of proteins?
22. What is the role of dietary fibres in food?

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(4 x 4 = 16)

PART D

*Answer **ANY Two** questions. Each question carries 12 marks.*

23. Explain the molecular mechanism in muscle contraction.
24. Give the steps in glycolysis, commenting the type of chemical reaction that takes place in each step.
25. Explain the mechanism of urine formation inside kidneys with schematic diagram of nephron.
26. Write an essay on the classification of Carbohydrates giving examples.

(12 x 2 = 24)
