

TM171820E

Reg. No:

Name:

M. Sc. DEGREE (C.S.S.) EXAMINATION, NOVEMBER 2017
SEMESTER I – ZOOLOGY
(2017 Admission Regular, 2016 Admission Supplementary/Improvement &
2015 Admission Supplementary)
ZY1C03TM – BIOCHEMISTRY

Time: Three Hours

Maximum Marks: 75

PART A

I. Answer any five questions. Each question carries 3 marks.

1. Comment on biological importance of water.
2. Comment on Glycogenesis.
3. Comment on quaternary structure of proteins. Give examples.
4. What are ribozymes?
5. What are prostaglandins?
6. Write notes on free radicals and antioxidants.
7. Distinguish between Ketogenesis and Ketolysis.

(5x3=15)

PART B

II. Answer any six questions. Each question carries 5 marks.

8. Comment on the structural similarity of amylopectin and glycogen. Briefly describe their biological significance.
9. Briefly explain biosynthesis of triglycerides.
10. Explain oxidative phosphorylation.
11. Degradation of Carbon skeletons of amino acids plays a vital role in the biochemical events in our body. Illustrate with examples.
12. Briefly describe catabolism of purines and pyrimidines.
13. Distinguish between α -helix and β -pleated structure of proteins.
14. What are different types of DNA? Give details.
15. Comment on biological importance of steroids.
16. Discuss various theories explaining activity of an enzyme.

(6x5= 30)

PART C

III. Answer any two questions. Each question carries 15 marks.

17. Briefly explain the classification of lipids. Also mention their properties and their biological significance.
18. Explain carbohydrate catabolism. Give details on energy released during this process
19. Give an account of the characteristics of different forms of DNA. Give details of their similarities and dissimilarities. Also highlight on their biological significance.
20. Write an essay on enzyme kinetics.

(2x15=30)