

2024
B.A./B.Sc.
Fourth Semester
CORE – 10
ZOOLOGY
Course Code: ZOC 4.31
(Biochemistry of Metabolic Processes)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Explain shuttle system. Describe the various types of membrane transporters. 4+10=14
2. (a) Write a note on different types of metabolism. 7
(b) Explain the use of reducing equivalent and cofactors. 7

UNIT-II

3. Give an account on the various phases of pentose phosphate pathway with diagrammatic illustration. 14
4. Define glycogenolysis. Explain the various steps of glycogenolysis, mentioning the enzymes involved in each steps. Add a note on the significance of glycogenolysis. 2+9+3 =14

UNIT-III

5. Describe the β -oxidation of saturated fatty acid with odd number of carbon atom. 14
6. Explain the biosynthesis of palmitic acid. 14

UNIT-IV

7. Explain the ornithine cycle in detail. Name the major sources of urea in urine? 12+2=14
8. Elucidate the fate of C-skeleton of glucogenic and ketogenic amino acids 14

UNIT-V

9. Discuss the various complexes in electron transport chain. 14
10. Explain the inhibitors and uncouplers of electron transport system. 14
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