



K23P 3301

Reg. No. :

Name :

I Semester M.Sc. Degree (CBSS – Supple. (One Time Mercy Chance)/Imp.)
Examination, October 2023
(2014 to 2022 Admissions)
ZOOLOGY
ZOO1C02 : Biological Chemistry

Time : 3 Hours

Max. Marks : 60

I. Answer **any two** of the following :

- 1) Explain in detail about electron transport system in mitochondria.
- 2) Discuss structure of proteins. Add a note on protein folding.
- 3) Derive Michaeli-Menten equation. Give the significance of K_M and V_{max} values.
- 4) Discuss in detail about the regulation of fatty acid metabolism. **(2×12=24)**

II. Answer **any two** of the following :

- 5) Explain deamination, transamination and transmethylation with examples.
- 6) Give an account of histidine metabolism.
- 7) Discuss glycogenesis and glycogenolysis.
- 8) Explain pentose phosphate pathway. **(2×8=16)**

III. Answer **any four** of the following :

- 9) What are sugar acids ?
- 10) What is zwitter ion ?
- 11) Discuss chemiosmotic coupling.
- 12) Distinguish enthalpy and entropy.
- 13) Give an account on enzyme inhibition.
- 14) What are sphingolipids ? **(4×5=20)**