



K23U 2388

Reg. No. :

Name :

**V Semester B.Sc. Degree (CBCSS – O.B.E. – Regular/Supplementary/
Improvement) Examination, November 2023
(2019 – 2021 Admissions)
CORE COURSE IN ZOOLOGY
5B07 ZLG : Biochemistry and Biophysics**

Time : 3 Hours

Max. Marks : 40

Instruction : Give illustrations and figures wherever necessary.

- I. Essay questions (**Each** question carries **8** marks). Answer **any two**. (2×8=16)
- 1) With the help of suitable examples, explain enzyme inhibition.
 - 2) Describe the procedure and applications of Column chromatography.
 - 3) Describe various methods for the measurement of radio activity. Comment on the applications of radio isotopes.
 - 4) With a schematic diagram, describe glycolysis.
- II. Short essay questions (**Each** question carries **4** marks). Answer **any two**. (2×4=8)
- 5) Discuss chemiosmotic hypothesis.
 - 6) Mention the underlying principle of NMR spectroscopy.
 - 7) Discuss glycogenolysis.
- III. Short answer questions (**Each** question carries **2** marks). Answer **any six**. (6×2=12)
- 8) Write a brief note on molecular chaperones.
 - 9) State and explain Henderson – Hesselbach equation.
 - 10) What are isozymes ? Provide one example.
 - 11) Discuss cell fractionation.
 - 12) Discuss the oxidation of glycerol.
 - 13) What are cerebrosides ? State one function.
 - 14) Mention the unique aspects of a phase contrast microscope.
 - 15) List some applications of Thin Layer Chromatography.

P.T.O.

