



ADITYA DEGREE COLLEGES: AU REGION

IV SEMESTER - MID - I - EXAMINATIONS

Date: 08-02-2025

Course: II BSC

Max. Marks: 60 M

Time: 3 hrs

Subject: General & Physical Chemistry (Chemistry Minor)

SECTION - A

Answer any five from the following questions

5 x 4 = 20 M

1. Explain the definition of enantiomers with two examples.
2. Explain the optical isomerism with examples of 2, 3- dibromopentane?
3. What is the definition of diastereomers with two examples.
4. Explain the specific rotation.
5. What is carbonic anhydrase & explain with one example?
6. Explain the usage of chelating agents in medicine, cisplatin as an anti cancer drug?
7. What is carboxy peptidase & explain with one example?
8. Explain the excess & deficiency of some trace metals?

SECTION - B

Answer all questions from the following.

4 x 10 = 40M

9. a) What is molecular representations? Explain the types of Molecular representation.

(OR)

b) What is optical isomerism & optical activity & also explain the wave nature of light with two examples.

10. a) Define chiral molecules and criteria of symmetry and elements with the enantiomers & diastereomers?

(OR)

b) Explanation of optical isomerism with examples tartaric acid, alanine, lactic acid ?

11. a) What is haemoglobin & explain the transfer of oxygen with the functions?

(OR)

b) Explain the Na/K-Pump with example ?

12. a) Explain the classification of Metal ions.

(OR)

b) Explain briefly about iron & applications in bio systems?