

AC-1796

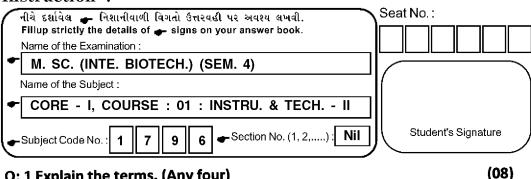
M. Sc. (Integrated Biotechnology) (Sem. IV) Examination

April / May - 2015

Core - I, Course: 01: Instrumentation & Techniques - II (Old Course)

Time: Hours] [Total Marks: 50

Instruction:



Q: 1 Explain the terms. (Any four)

- 1) Difference between isothermal analysis and temperature programming in
- 2) Types of Ion- exchange chromatography? Write its principle.
- 3) Give the reason for difference in pH of stacking gel and separating gel.
- 4) Define: Nebulization
- 5) Define electrophoresis. Explain its role electrophoretic mobility.

Q: 2 Answer any two of following.

(14)

- 1) Give the detailed description of various methods of development in paper chromatography.
- 2) Write a detailed note on western blotting technique.
- 3) Explain construction, working and application of electrophoresis.

Q: 3 Attempt any two of following.

(14)

- 1) Write a detailed note on 2D electrophoresis for proteins.
- 2) Give the detailed description of GC-MS.
- 3) Discuss the mechanism of acrylamide and bisacrylamide.

Q: 4 Attempt any two of following.

(14)

- 1) Explain the principle of IR.
- 2) Explain the principle of atomic absorption spectrometry and describe the flame atomizers used in AAS.
- 3) Discuss the essential features of mass spectroscopy.