



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 :

नीचे दशांशके निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :  
M. SC. (INTE. BIOTECH.) (SEM. 4)

Name of the Subject :  
CORE - I, COURSE : 01 : INSTRU. & TECH. - II

Subject Code No. : 1 7 9 6 Section No. (1, 2,.....): Nil

Seat No. :  
[ ] [ ] [ ] [ ] [ ] [ ]

Student's Signature

Q: 1 Explain the terms. (Any four)

(08)

- 1) Difference between isothermal analysis and temperature programming in GC?
- 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.**
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