

S.E = IV Sem BIOTECH

# Analytical methods in Biotechnology

25

QP Code : 12530

(3 Hours)

[ Total Marks : 80

- N.B. : (1) Question No. 1 is compulsory.  
(2) Attempt any four questions from remaining six questions.  
(3) All questions carry equal marks.

1. Write short notes on. 20
  - (a) Beer Lambert's Law.
  - (b) Application of tracer technique.
  - (c) Principle of chromatography.
  - (d) Isoelectric point.
  
2. (a) Explain the principle & working of HPLC. 10  
(b) Explain in detail two dimensional electrophoresis. 10
  
3. (a) Discuss in detail about SDS-PAGE. 10  
(b) Mention the different factors that affect electrophoresis in detail. 10
  
4. (a) Explain in detail about differential centrifugation. 10  
(b) Explain Ion exchange chromatography. 10
  
5. (a) Discuss the principle and working of affinity chromatography. 10  
(b) Explain Geiger Muller and Simtullation counter. 10
  
6. (a) Explain the principle and instrumentation of UV-Visible spectrometry. 10  
(b) Give the application of immuno electrophorus. 10