

(i) Printed Pages : 2

Roll No. ....

(ii) Questions : 9

Sub. Code : 

1	0	9	1	3
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Exam. Code : 

5	0	0	3
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NEP U.G. Common-Inter Disciplinary Course 3rd Semester  
(2125)

## BIOTECHNOLOGY

### Paper–Bioanalytical Techniques–I

Time Allowed : Three Hours]

[Maximum Marks : 45

Note :— Attempt *five* questions in all. Question No. 1 is compulsory.  
Select *one* question from each unit.

#### (Compulsory Question)

1. (a) What are Scintillation counters? 2
- (b) What is a centrifuge? 2
- (c) What is Electrophoresis? 2
- (d) What is HPLC? 2
- (e) What is a Mass spectrometer? 1

#### UNIT—I

2. Write working and applications of spectrophotometry. 9
3. Discuss principle and working of Native and SDS PAGE. 9

#### UNIT—II

4. Discuss principle and applications of Phase Contrast Microscopy. 9
5. Write about Principle and Applications of Ultra Centrifugation. 9

### UNIT—III

6. Deliberate on Principle and applications of Ion exchange chromatography. 9
7. Discuss principle and applications of HPLC. 9

### UNIT—IV

8. Elaborate on Principle, Working and Applications of GM Counters. 9
9. Discuss principle and working of Chemical ionization Mass Spectrometry. 9