



DE-1344

M. Sc. (Sem. I) (Microbiology) Examination

March / April - 2016

MB - 104 : Bioanalytical Techniques &
Instrumentation
(New Course)

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दर्शाविए निशानीवाणी विगतो उत्तरवही पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
← M. SC. (SEM. I) (MICROBIOLOGY)	<input type="text"/>
Name of the Subject :	<input type="text"/>
← MB - 104 : BIOANAL. TECHN. & INSTRUMENTATION	<input type="text"/>
← Subject Code No. : <input type="text"/> 1 <input type="text"/> 3 <input type="text"/> 4 <input type="text"/> 4 ← Section No. (1, 2,.....): <input type="text"/> Nil	<input type="text"/>
	Student's Signature

(2) Figures to the right indicate full marks of the question.

(3) Draw neat and labelled diagrams whenever necessary.

1 Answer the following : (Any two) 18

- Discuss methods of radioactivity detection and measurements in detail.
- Write a note on combined type pH electrode.
- Give an account on data output in analytical instrument.

2 Attempt the following: (Any two) 18

- Describe working principle and application of Ion exchange chromatography.
- Discuss principle and applications of gas chromatography.
- Elaborate on types, care and safety aspect of centrifuge

3 Answer the following: (Any two) 18

- Discuss different methods of ionization used in mass spectroscopy.

- b) Describe types of photocell used in UV/Vis spectrophotometer.
- c) Give working principle of FT-IR spectroscopy.

4 write short notes on the following: (any two)

16

- a) Discuss electrophoresis of nucleic acids in detail.
 - b) Give an account on isoelectric focusing.
 - c) Discuss various support media use for electrophoresis.
-