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) Figures to the right indicate full marks of the question.
(2) Draw neat and labelled diagrams whenever necessary.

1 Answer the following : (Any two) 18
   a) Discuss methods of radioactivity detection and measurements in detail.
   b) Write a note on combined type pH electrode.
   c) Give an account on data output in analytical instrument.

2 Attempt the following: (Any two) 18
   a) Describe working principle and application of Ion exchange chromatography.
   b) Discuss principle and applications of gas chromatography.
   c) Elaborate on types, care and safety aspect of centrifuge

3 Answer the following: (Any two) 18
   a) 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)
a) Discuss electrophoresis of nucleic acids in detail.
b) Give an account on isoelectric focusing.
c) Discuss various support media use for electrophoresis.