

M.Sc. Part—I Semester—I (C.B.C.S. Scheme) Examination

BIOCHEMISTRY
(Analytical Technique)

Paper—II

Time : Three Hours]

[Maximum Marks : 80

Note :— All questions are compulsory and carry equal marks.

1. Describe in detail general scheme for purification of bio components. 16

OR

Describe in brief methods for lysis of plant, animal and microbial cells. 16

2. Explain in detail the principle, method and applications of HPLC. 16

OR

Describe in detail the principle, method and applications of Ion Exchange Chromatography. 16

3. Describe the following :—

(a) 2 D-Electrophoresis. 8

(b) Isoelectric Focussing. 8

OR

(p) Gel Electrophoresis. 8

(q) Western blotting. 8

4. Describe in brief :—

(a) Principle of UV-visible spectrophotometer. 5

(b) Applications of mass spectroscopy. 5

(c) Atomic emission and absorption. 6

OR

(p) ESR. 5

(q) NMR. 5

(r) X-ray diffractions. 6

5. Describe the following :—

(a) Principle of tracer technique. 5

(b) Isotopic Labeling. 5

(c) Autoradiography. 6

OR

(p) Applications of tracer technique. 5

(q) Measurements of isotopes. 5

(r) Liquid scintillation counting. 6

