

(Time: 3 Hours)

Total Marks: 80

NB: (1) Question No.1 is compulsory

(2) Attempt any 3 questions out of remaining 5 questions

(3) Each question is of 20 marks

(4) Figures to right indicates full marks

- Q.1 Write Short Notes on Four of the following 20
- a- Principle of sedimentation
 - b- Immunoelectrophoresis
 - c- Size exclusion chromatography
 - d- Limitations of Beers Lamberts law
 - e- Extinction coefficient
- Q.2 a) Describe differential centrifugation 10
- b) Discuss principle and application of centrifugation 10
- Q.3 a) Define chromatography. Describe column chromatography 10
- b) Discuss principle, components and application of HPLC 10
- Q.4 a) What is electrophoresis? Discuss factors affecting on electrophoresis 10
- b) Describe seperation of biomolecules by using isoelectrofocussing techniques 10
- O.5 a) Describe principle, instrumentation and applications of UV-visible spectrophotometry 10
- b) Discuss principle, working and application of affinity chromatography 10
- Q.6 a) Describe various methods of radioactive labelling 10
- b) Describe detection and measurement of radioactivity using proportional chamber 10