

Time allowed: 3 Hours

Max. Marks: 40

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Write short note on following

- a) Crystalloid
- b) Differentiate Molarity & Molality
- c) Uses of Chromatograph
- d) Calculation of Equivalent Weight
- e) Extraction of Aliphatic hydrocarbons
- f) Basic principle of titrimetric analysis
- g) Amphoteric compounds
- h) Two general properties of DNA

(8x1)

UNIT-I

II. a) What is a saturated solution? How is it prepared? Differentiate parent solution & standard solution.

b) Explain various ways of measuring Ph.

2x4=8

III. What are radio-isotopes? Explain their use in biochemistry in detail.

8

UNIT-II

IV. a) Classify the carbocyclic organic compounds and explain each type with an example. 5

b) Differentiate primary & secondary alcohols.

3

V. a) What is Dialysis? How does it differ from diffusion?

b) Explain different types of solutions on the basis of concentration of solute.

2x4=8

UNIT-III

VI. Explain the following analytic techniques of Immunochemistry

a) ELISA

b) Immunoelectrophoresis

2x4=8

VII. a) Write a note on the principle & use of flame photometer.

b) Describe the applications and principle of fluorimeter.

2x4=8

UNIT-IV

VIII. Write a brief note on the following

a) Therapeutic drug monitoring

b) β -oxidation of fatty acids

2x4=8

IX. a) Write the physical properties of fats

b) Transamination in protein metabolism

2x4=8

x-x-x