

2055
B. Voc. (Medical Laboratory Technology)
Second Semester
BMLT-204: Basics of Biochemistry

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

Q: 1. Explain the followings:

- a) Differentiate between acid, base and salt.
- b) What is a buffer solution?
- c) Name any two peptide hormones.
- d) Define osmotic pressure.
- e) What is the objective of Therapeutic Drug Monitoring?
- f) Write the application of titrimetry.
- g) Define surface tension.
- h) What is the function of densitometer?

(8X1=8)

UNIT-I

Q: 2. (a) Write note on pH indicators.

(b) Briefly explain Percent solutions & Standard solutions. (4,4)

Q: 3. What are Radioisotopes. Write different uses of radioisotopes in biochemistry. (8)

UNIT-II

Q: 4. a) Describe general characteristics of Organic compounds.

b) Differentiate between colloids and crystalloids. (4,4)

Q: 5. a) Write difference between hypotonic, hypertonic & isotonic solution.

b) What is dialysis? How osmosis is used in dialysis? (4,4)

UNIT- III

Q: 6. Define immunochemistry and write basic steps of immunochemistry. (8)

Q: 7. Write notes on the followings:

(a) Spectrophotometer.

(b) Electrophoresis (4,4)

UNIT- IV

Q: 8. a) Discuss the general properties of nucleic acids.

b) Differentiate between Hormones and Enzymes. (4,4)

Q: 9. Discuss basic concept of metabolism of carbohydrates. (8)

x-x-x