

2056
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. 1 which is compulsory and selecting one question from each Unit.

x-x-x

I. Answer the following:-

- Define the inorganic compounds?
- What is the difference between aliphatic and aromatic compounds?
- What is the pH. indicators?
- Define the standard solution?
- What do you mean by carbohydrate?
- What is the flame photometer?
- Two uses of electrophoresis.
- Give two names of proteins

(8x1)

UNIT - I

- II. (a) Briefly describe the atom and its components.
(b) What is acid base balance? Write its significance in biological sciences. (2x4)
- III. (a) Write about the radioactive materials and their characteristics and applications.
(b) Describe in brief about the pH meter with examples. (2x4)

UNIT - II

- IV. (a) Briefly describe the acidic compounds with examples.
(b) What is the dialysis? Write its importance in patients. (2x4)
- V. (a) Write about hypertonic and isotonic solutions on the basis of ion concentrations and their characteristics.
(b) Differentiate between colloids and crystalloids. (2x4)

P.T.O.

(2)

UNIT - III

- VI. (a) Give the names of major classes of centrifugations and their applications.
(b) What is the monopan balance? Draw it's a fine diagram. (2x4)
- VII. (a) Write about the chromatography? Also write about the various applications of chromatography.
(b) Briefly describe the electrophoresis and its application in protein estimation. (2x4)

UNIT - IV

- VIII. (a) Write the major characteristics of monosaccharides.
(b) Write the basic characteristics of DNA and RNA. (2x4)
- IX. (a) Write about the carbohydrate metabolism. Write only the names of related metabolic pathways.
(b) Briefly describe proteins. Why it is important? (2x4)

x-x-x