

2054

B. Voc. (Medical Lab 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:-

- a) Define acid.
- b) What is the difference between molarity and molality?
- c) Give the name one base?
- d) Define colloids.
- e) What do you mean by surface tension?
- f) What is the flame photometer?
- g) Difference between spectrophotometer and colorimeter.
- h) Give two names of aromatic compounds. (8x1)

UNIT - I

- II. a) Briefly describe the buffer solution and its significance.
- b) What is the pH? Write one method by which pH is measured. (2x4)
- III. a) Write about the applications of radioactive materials in biochemistry.
- b) Describe in brief about normal and molar solution. (2x4)

UNIT - II

- IV. a) Briefly describe the characteristics of organic compounds.
- b) What is the dialysis? Write its importance in Biochemistry. (2x4)
- V. a) Write about classification of colloids.
- b) Differentiate between organic and inorganic compounds. (2x4)

UNIT - III

- VI. a) Give the names of major classes of centrifugations and their applications.
- b) Write the significance of electrophoresis. (2x4)
- VII. a) Explain about the spectrophotometers. Also write about its applications in labs.
- b) Briefly describe the urinometer and its application in urine analysis. (2x4)

UNIT - IV

- VIII. a) Write the major characteristics of proteins.
- b) Write the basic characteristics of nucleic acid, and classified them. (2x4)
- IX. a) What is the carbohydrate metabolism? Write only the names of related metabolic pathways.
- b) Briefly describe about enzyme. Why enzymes are important in biological system? (2x4)

x-x-x