

2022

B. Voc. (Medical Lab Technology)
First Semester

BMLT-104: Introduction to Laboratory Equipments

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. Give the answer of following questions in very brief:-

- a) Why water bath used in lab?
- b) What is use of incubators?
- c) Why micropipette used to measure the volumes?
- d) Where we store the hygroscopic chemicals?
- e) What do you mean by ultra-centrifugation?
- f) Give the name of two types of microscopes in lab.
- g) Write the application of UV spectrophotometer.
- h) Why we use electron microscope?

(8x1)

UNIT - I

- II. a) What is the hot air oven? Write the applications of oven in the lab.
- b) What is the autoclave? Describe in brief the structure of autoclave. (4,4)
- III. a) Write the names of four instruments which are used in qualitative analysis.
- b) Describe the various types of safety measures for lab equipments. (4,4)

UNIT - II

- IV. a) What are the various methods to disinfection of laboratory?
- b) What are the major reasons which cause the errors in results in labs? (4,4)
- V. a) What are the different precautions used to glass apparatus?
- b) Describe major methods to clean machines in labs. (4,4)

UNIT - III

- VI. a) What are various components of compound microscope?
- b) Write the working principle of dark ground microscope. (4,4)

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(2)

- VII. a) What is the UV light microscope? Write its applications.
b) Write the only applications of polarized microscope. (4,4)

UNIT - IV

- VIII. a) What are the merits of electron microscope over the compound microscope?
b) Write a short on fluorescent microscope. (4,4)
- IX. a) What is the ultra-microtomy care and handling?
b) Describe in brief about the various methods of lab safety and instrumentation (4,4)

x-x-x