

B. Voc. (Medical Lab. Technology)
Third Semester
BMLT-304: Fundamentals of Microbiology

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

Q: 1. Explain the followings:

- a) Draw the structure of virus.
- b) Write two characteristics of algae.
- c) What is the function of actinomycetes?
- d) What are the types of microbial growth?
- e) What is antiseptic used for?
- f) Define morphogenesis.
- g) What is the role of culture media in microbiology?
- h) Differentiate sterilization & disinfection.

(8X1=8)

UNIT-I

Q: 2. (a) Explain the types of microbial nutrition.

(b) Discuss in brief the morphology of microbes.

(4,4)

Q: 3. (a) Discuss the safety measures in microbiology.

(b) What are the factors that affect microbial growth.

(4,4)

UNIT-II

Q: 4. Explain the general characteristics and morphology of bacteria.

(8)

Q: 5. What are bacteriophages. Explain the structure, multiplication process and methods of detection of bacteriophages.

(8)

UNIT- III

Q: 6. Explain the general characteristics and morphology of pathogenic fungi.

(8)

Q:7. Write notes on the followings:

(a) Characteristics of Actinomycetes.

(b) Laboratory diagnosis of Human viruses

(4,4)

UNIT- IV

Q:8. (a) Explain the different techniques of obtaining pure culture.

(b) Briefly discuss about the uses and standardization of culture media.

(4,4)

Q:9. Write notes on the followings:

(a) Principle and Theory of Gram staining

(b) Methods of sterilization in microbiology.

(4,4)

x-x-x