

B. Voc. (Medical Lab Technology) FYUP
First Semester
MLT-102: 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

I. Answer the following:-

- a) Define the microbiology?
- b) Give name of gram +ve bacteria?
- c) Flagella.
- d) Where spore is present?
- e) Give a name of human virus.
- f) What are the antiseptics?
- g) Role of RBCs.
- h) Pure culture.

(8x1)

UNIT - I

- II. a) Briefly describe the scope of microbiology.
- b) Differences between prokaryotes and eukaryotes cells.
- III. a) Write in brief about the structure of *E coli*.
- b) Briefly describe the growth curve of bacteria.

(2x4)

(2x4)

UNIT - II

- IV. a) Briefly describe the structure of fungal cell.
- b) Briefly describe the structure of cell wall of bacterial cell.
- V. a) Write the main features spores and cysts.
- b) Mentioned the functions of capsules of bacteria.

(2x4)

(2x4)

UNIT - III

- VI. a) Write the main characteristics of algal cell.
- b) What are pathogenic fungi? Write names of human diseases that caused by fungi.

(2x4)

P.T.O.

(2)

- VII. a) Write about the structure of bacteriophage. How you detect virus in lab.
b) Briefly describe general properties of viruses. (2x4)

UNIT - IV

- VIII. a) What do you mean by pure culture? Mentioned one method to make pure bacterial culture.
b) Write a short note on Gram staining. (2x4)
- IX. a) Write in brief about the method of physical sterilization in microbiology.
b) Mentioned the various disinfectants used in microbiology. (2x4)

x-x-x