

B.A./B.Sc. (General) Third Semester
Industrial Microbiology
Agricultural Microbiology

Time allowed: 3 Hours

Max. Marks: 33

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Attempt the following:-

- a) Define Methanogens
- b) Name the pigments present in blue-green algae.
- c) What is the nitrogen fixation form of the Rhizobium bacterium called?
- d) Smut of wheat is caused by which organism.
- e) Define VAMs.
- f) Name the viral diseases of plants.
- g) CFU stands for what?
- h) Define Bio-magnification
- i) What is rinderpest? (9x1)

UNIT- I

II. What are bioinsecticides. Explain the role of bacillus thuringiensis as an insecticide. (6)

III. Write notes on:-

- a) Blue green algae as bio fertilizer
- b) Rhizobium as biofertilizer (3,3)

UNIT- II

IV. What are bacterial diseases of crops? Explain citrus canker with respect to its causative agents, symptoms and control measures. (6)

V. Explain any one fungal disease of monocots in detail. (6)

UNIT- III

VI. Enlist the diseases of farm animals. Explain foot and mouth disease for its causative agent, impact on the animal, diagnosis and treatment. (6)

VII. What is biomagnifications? Explain its role in pesticide microbiology. (6)

UNIT- IV

VIII. Write notes on:-

- a) Sulphate Reduction Pathway
- b) Economic importance of Methylophs (3,3)

IX. Explain the use of nucleotides as N-source for growth of certain microorganisms. (6)

x-x-x