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B.A./B.Sc. (General) Third Semester
Industrial Microbiology
IMB-302: Agricultural Microbiology

Time allowed: 3 Hours

Max. Marks: 33

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

I. Explain/define/comment (any six):-

- a) Collego
- b) Blight of Rice
- c) FMD
- d) Biomagnification
- e) Sulphur utilizing bacteria
- f) Nucleic acid degradation
- g) *Anabaena azolla* interaction
- h) Chlorosis

(6x1½)

UNIT - I

- II. Describe the role and mechanism of action of *Bacillus thuringiensis* as bio insecticides. (6)
- III. Describe role of *Rhizobium* as fertilizer in legumes. (6)

UNIT - II

- IV. Describe microbial pathogenicity of Bhindi yellow mosaic plant disease. (6)
- V. Describe pathogenicity and control of rust of wheat. (6)

UNIT - III

- VI. Write down different routes for the spread of diseases in animals. (6)
- VII. Describe by taking suitable example the mechanism of biodegradation of pesticides. (6)

UNIT - IV

- VIII. Write down economic importance of methylotrophs and methanogens. (6)
- IX. Describe sulphate reduction pathway and its significance. (6)

x-x-x