

2021
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. Write short note on following:-

- a) What do you mean by free living Nitrogen fixers?
- b) Discuss synergism.
- c) Define parasites.
- d) Bt genes.
- e) How chemical fertilizers harm the plants
- f) Discuss zoonotic diseases.
- g) Draw the structure of nucleotide.
- h) Define Archaeobacteria.
- i) What do you mean by PGPRs? (9x1)

UNIT – I

- II. Elaborate the role of bioherbicides as biocontrol agent. (6)
- III. Explain economic importance of biofertilizers over chemical fertilizers. (6)

UNIT – II

- IV. What do you mean pathogens? Explain mechanism of action of microbial pathogens. (6)
- V. Discuss various aids to control plant diseases. (6)

UNIT – III

- VI. How pesticides and insecticides cause biomagnification? What are their side effects on human health? (6)
- VII. Elaborate various diseases of farm animals. (6)

UNIT – IV

- VIII. Explain economic importance of sulphur utilizing bacteria. (6)
- IX. How biofuel (biogas) is produced by Methanogens. (6)

x-x-x