

V Semester B.Sc. Examination, November/December 2017
 (Semester Scheme)
 (CBCS – F/R)
MICROBIOLOGY – V
Agriculture and Environmental Microbiology

Time : 3 Hours

Max. Marks : 70

Instructions : 1) Answer **all** Sections.

2) Draw diagram **wherever** necessary.

SECTION – A

B.M.S.C.W

I. Write brief notes on the following.

(5×2=10)

- 1) Soil Fungi
- 2) Predation
- 3) Ectomycorrhizae
- 4) Municipal water
- 5) Allergen.

SECTION – B

II. Answer **any four** of the following.

(4×5=20)

- 6) Give an account on Biodegradation of pectin.
- 7) Describe the role of NPV as Biopesticide.
- 8) Describe the causal organism, symptoms and control measures involved in Tomato leaf curl disease.
- 9) Give an account of the Coliform test.
- 10) Describe atmospheric layers.



SECTION - C

III. Answer **any three** of the following.

(3×10=30)

- 11) Describe the mechanism of Nitrogen fixation. Give an account on non-symbiotic Nitrogen fixation.
- 12) Describe the Bioleaching of copper and Iron.
- 13) Explain the role of phosphate solubilizers and Blue Green algae as Biofertilizers.
- 14) Explain :
 - a) Microbes in aquatic environment
 - b) Membrane filtration.
- 15) Explain :
 - a) Microflora of outdoor and indoor air
 - b) Rotorod sampler.

BMSCW

SECTION - D

IV. Answer in **one** line only.

(10×1=10)

- 16) Competition
- 17) EMB
- 18) Littoral zone
- 19) Lemon's device
- 20) Phylloplane
- 21) Aeroallergen
- 22) Leghaemoglobin
- 23) Soil aggregation
- 24) Azolla
- 25) Mycoplasma.