



NS – 339

V Semester B.Sc. Examination, November/December 2016
(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

I. Write brief notes on the following :

(5×2=10)

- 1) Nif gene.
- 2) Soil actinomycetes.
- 3) Commensalism.
- 4) Bacillus thuringiensis.
- 5) Endotoxin.

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SECTION – B

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

(4×5=20)

- 6) Explain Nitrogen cycle.
- 7) What are Bio-fertilizers ? Add a note on applications of Bio-fertilizers.
- 8) Describe the causal organism, symptoms and control measures involved in blast disease of rice.
- 9) Explain the sources of water pollution.
- 10) Explain Allergy Testing.



SECTION - C

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

(3×10=30)

- 11) What are mycorrhizae ? Add a note on types and applications.
- 12) Explain any 2 impaction samplers.
- 13) Describe the causal organism, symptoms and control measures involved in Downy Mildew of grapes.
- 14) Write a detailed account on biodegradation of cellulose and pesticides.
- 15) Explain Municipal Water Treatment.

SECTION - D

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

(10×1=10)

- 16) TMV.
- 17) Bacteroid.
- 18) Aeroallergen.
- 19) Flavonoids.
- 20) Parasitism.
- 21) BOD.
- 22) VAM.
- 23) Alum.
- 24) Impingement.
- 25) Rhizoplane.

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