



GN-254

V Semester B.Sc. Examination, December - 2019
(CBCS - F+R, Semester Scheme)

MICROBIOLOGY - V

Agriculture and Environmental Microbiology

Time : 3 Hours

Max. Marks : 70

- Instructions :** (i) Answer **all** the sections.
(ii) Draw diagrams **wherever** necessary.

SECTION - A

I. Write brief notes on the following :

5x2=10

1. Synergism
2. Soil fungi
3. Rotorod sampler
4. Potable water
5. Azotobacter

SECTION - B

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

4x5=20

6. Give an account on the sources of water pollution.
7. Write a note on 'Mycorrhiza'.
8. Explain the pathogenicity of 'Tomato leaf curl' disease.
9. Write a note on - 'Allergy testing'.
10. Discuss the role of 'Trichoderma' as a biopesticide.

P.T.O.

**SECTION - C**

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

3x10=30

11. Describe in detail the process of 'Symbiotic Nitrogen Fixation'.
12. Define - Bioleaching. Discuss the bioleaching of Copper and Iron.
13. Describe the strategies employed in Municipal water treatment.
14. Explain the principles of Impaction and Impingement samplers with examples.
15. Write notes on :
 - (a) Negative microbial interactions
 - (b) Sulphur cycle.

SECTION - D

IV. Answer in **one** sentence :

10x1=10

16. Cercospora
17. BT toxin
18. EMB
19. PSB
20. Rhizoplane
21. NPV
22. MPN index
23. Pectinase
24. Gravity slide technique
25. Lentic zone

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