Fifth Semester B.Sc. Degree Examination, October/November 2019

(CBCS Semester Scheme)

Microbiology

Paper V (5.1) - AGRICULTURAL AND ENVIRONMENTAL MICROBIOLOGY

Time: 3 Hours]

[Max. Marks: 90

Instructions to Candidates:

- 1. Answer ALL Parts.
- 2. Draw diagrams wherever necessary.

PART - A

Answer any TEN questions in 1 or 2 sentences:

 $(10 \times 2 = 20)$

- 1. Actinomycets
- 2. Biodegradation
- 3. VAM
- 4. Root nodules
- 5. Azospirillum
- 6. Biopesticide.
- 7. Sandal spike disease
- 8. Coffee rust
- 9. Bioaerosol
- 10. Chlorination
- 11. Vertical cylinder trap
- 12. Amoebiasis.



Q.P. Code - 42543

PART-B

Answer any EIGHT of the following:

 $(8 \times 5 = 40)$

- 13. Explain soil profile in detail.
- 14. Give an account of biodegradation of pesticides.
- 15. Explain sulphur cycle.
- 16. Write a note on control and management of plant diseases.
- 17. Give an account of :
 - (a) Azatobacter as biofertilizer
 - (b) Hirst spore trap.
- 18. Write a note on :
 - (a) Antagonism
 - (b) Plasmopora Viticola.
- 19. Write a note on atmospheric layers.
- 20. Explain the sources and types of water pollution.
- 21. Briefly explain the biohazards in occupational environment.
- 22. Discuss the etiology, pathogenesis and treatment of Hepatitis A.

PART - C

Answer any THREE of the following:

 $(3 \times 10 = 30)$

- 23. Explain nitrogen cycle in detail.
- 24. Discuss Bacillus Thuringiensis and NPV as biopesticides.
- Describe the symptoms, treatment and control of Tomato leaf curl and grassy shoot disease.
- 26. Discuss the distribution of microorganisms in aquatic environment.
- 27. Explain the steps involved in waste water treatment.