**D**71083

(Pages : 2)

Name

# FIFTH SEMESTER B.Sc. DEGREE EXAMINATION **NOVEMBER 2014**

(UG-CCSS)

## **Open Course – Microbiology**

# **MB** 5D 02 – ENVIRONMENTAL MICROBIOLOGY

Time : Three Hours

Maximum: 30 Weightage

## **Section A**

Answer all the **twelve** questions.

- 1. In an ecosystem decomposer air
- 2. Percentage of nitrogen fixed annually on earth by the action of bacteria is \_\_\_\_\_
- 3. Example for a symbiotic nitrogen fixer is \_\_\_\_\_
- 4. Bacteric responsible for denitrification are
- 5. Ammonia oxidising bacteria are ------
- 6. \_\_\_\_\_forms root nodules.\_
- 7. Anaerobic non-symbiotic nitrogen fixing organisms.
- 8. <u>has been used for centuaries</u> to enrich rice paddies.
- 9. Full form of TMV.
- 10. Example for a water borne illness is \_\_\_\_\_
- 11. The type of cancer occurring due to ozone depletion.
- 12. Green house effect is due to the gas —

 $(12 \text{ x} \frac{1}{4} = 3 \text{ weightage})$ 

### Section B

Answer all the **nine** questions in one **or** two sentences.

Comment on :

- 13. Nitrogenase.
- 15. Autotrophs.
- 17. Root nodules.
- 19. Habitat.
- 21. Rhizophere.

- 14. Membrane filter.
- Food web. 16.
- BOD. 18.
- 20. Osmotic pressure.

 $(9 \ge 1 = 9 \text{ weightage})$ 

Turn over

#### Section C

Answer briefly any **five** questions.

- 22. Air borne micro-organisms.
- 23. Biomagnification.
- 24. Coliform bacteria.
- 25. Water borne illness.
- 26. Rhizobium.
- 27. GMO.
- 28. Micro-organisms in sewage treatment.

 $(5 \ge 2 = 10 \text{ weightage})$ 

#### Section D

Answer any **two** questions in detail.

- 29. Explain the impact of water pollution in human health.
- 30. Explain the different Biogeochemical cycles and their importance.
- 31. Explain/elaborate on the Global environmental problems, their impact and approaches for management.

 $(2 \times 4 = 8 \text{ weightage})$