D 13241	(Pages : 2)	Name
		Reg. No

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2016

(CUCSS)

Microbiology

MB 1C 03—ENVIRONMENTAL AND SANITATION MICROBIOLOGY

Time: Three Hours Maximum: 36 Weightage

Section A

Answer all questions in 2 **or** 3 sentences. Each carries a weightage of 1.

- 1. R:S Ratio.
- 2. Synergism.
- 3. VA Mycorrhiza.
- 4. Phylloplane.
- 5. Phosphate solubilization.
- 6. Anderson air sampler.
- 7. Coliforms.
- 8. Rotating Biological Contactor (RBC).
- 9. Antibiosis.
- 10. Asymbiotic nitrogen fixation.
- 11. Disinfectant sprays.
- 12. Negative air ionization.
- 13. Rhizobium.
- 14. EMB agar.

 $(14 \times 1 = 14 \text{ weightage})$

Section B

Write notes on any **seven.**Each carries a weightage of 2.

- 15. Symbiotic nitrogen fixation.
- 16. Sulfur cycle.
- 17. Carbon cycle.

Turn over

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- 18. Reuter centrifugal air sampler.
- 19. Anaerobic methods of sewage treatment.
- 20. Treatment of petroleum wastes.
- 21. Early warning of plant diseases by air monitoring.
- 22. Multiple tube technique.
- 23. Rhizoshere microflora.
- 24. Solid waste disposal by land filling.

 $(7 \times 2 = 14 \text{ weightage})$

Section C

Write in detail about **two.**Each carries a weightage of 4.

- 25. Describe various steps involved in water purification.
- 26. Discuss the various aerobic methods of sewage treatment.
- 27. Discuss the role of microbes in the degradation of xenobiotics and recalcitrants.
- 28. Explain phosphorous cycle.

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