

18P224

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Name:.....

Reg. No:.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2019

(Regular/Improvement/Supplementary)

(CUCSS - PG)

CC15P ES2 C08 - ENVIRONMENTAL MICROBIOLOGY

(Environmental Science)

(2015 Admission onwards)

Time: Three Hours

Maximum: 36 Weightage

I. Answer *all* questions. Each question carries 1 weightage.

1. What is Chemotaxonomy?
2. Write an example of antibiosis.
3. Write the name of any two plant viruses.
4. Distinguish between encystment and excystment.
5. What are micro algae?
6. What are prions?
7. Which is the smallest known animal virus?
8. What are Methanogens?
9. What are acidophiles?
10. Name any two symbiotic nitrogen fixing bacteria.
11. What are trichoderma species?
12. What are plasmids?
13. What are obligate anaerobic microbes?
14. What are fungi?

(14 x 1 = 14 Weightage)

II. Answer any *seven* questions. Each question carries 2 weightage.

15. Write about the methods in taxonomy of bacteria.
16. Write about the autotrophic and heterotrophic metabolism.
17. Explain cytocidal infection and cell damage by virus.
18. Write a note on insect and insect borne viruses.
19. Comment on growth curve as a measurement of growth.
20. Explain the growth limitation by environmental factors.
21. Explain the classification of fungi.
22. Discuss the characteristics and reproduction in micro algae.
23. Explain the general properties of viruses.
24. What are the scopes of environmental microbiology?

(7 x 2 = 14 Weightage)

III. Answer any *two* of the following. Each question carries 4 weightage.

25. Write an essay on microbial community interactions with the help of suitable examples.
26. Write about phenotypic, genotypic and serological characterization of bacteria and explain metabolism and nutrient uptake.
27. Explain the classification, distribution, importance, morphology and nutrition of protozoans.
28. Explain the microbial communities in aquatic environment, terrestrial systems, plants and animals.

(2 x 4 = 8 Weightage)
