

19P219

(Pages: 1)

Name.....

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2020

(CUCSS - PG)

CC19P ESC2 C08 - ENVIRONMENTAL MICROBIOLOGY AND BIOTECHNOLOGY

(Environmental Science)

(2019 Admissions - Regular)

Time: Three Hours

Maximum: 30 Weightage

I. Answer any *four* questions.

1. Comment on NFT.
2. What are xenobiotics?
3. Comment on the applications of enzymes in leather industry.
4. Explain the ecological importance of micorbial mats.
5. Give an account of genetically engineered microorganisms. What are its impacts?
6. What is Phage typing?
7. What are superbugs?

(4 x 2 = 8 Weightage)

II. Answer any *four* questions.

8. What is vermicomposting? Discuss the applications in municipal soil waste management.
9. Write short notes on bio desulphurization of oils.
10. Give an account of AMATS.
11. Give an account on the role of biotechnology in environmental protection.
12. What are the strategies for bioremediation of soil?
13. Describe the metabolic pathway for PHB accumulation.
14. Discuss biodegradation of lignin & cellulose.

(4 x 3 = 12 Weightage)

III. Answer any *two* of the following.

15. Discuss the different methods for microbiological analysis of water.
16. What are biosensors? Illustrate the principle and development on biosensors?
17. Discuss the biotechnological methods for the control of air pollution.
18. Write an essay on bioremediation of pesticides.

(2 x 5 = 10 Weightage)
