



25024340

QP CODE: 25024340

Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, APRIL 2025

Fourth Semester

M Sc BIOCHEMISTRY

ELECTIVE - BC820403 - ECOLOGY AND ENVIRONMENTAL BIOCHEMISTRY

2019 ADMISSION ONWARDS

33A389BA

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Describe Nitrogen cycle.
2. Explain endemism.
3. How toxic heavy metals affects environment?
4. Classify pesticide residue.
5. Explain different methods in determining biodegradability.
6. What is Phytoremediation and its applications.
7. Write a note on biodegradation of agricultural chemicals.
8. Write short notes on biocontrol of plant pathogens.
9. Briefly explain Integrated waste management.
10. Briefly explain CITES.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Homeostasis in ecosystem is maintained through cybernetics principle.Explain.
12. What is r and k selection in population ecology? Describe population growth curve.
13. Wrt e a note on water quality parameters.





14. How organic chemicals affects the environment.
15. Write a note on microbial metal transformation.
16. Analyse the use of plants in biodegradation and environment cleaning.
17. Briefly explain Integrated pest management.
18. Write short notes on Stockholm & Rio Conference.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. What is Biodiversity? Comment on different types of biodiversities in an ecosystem and methods used for conservation of biodiversity.
20. Chemistry of soil: Formation; Constituents and properties of soils; Composition and type of soil.
21. What is Bioremediation? Briefly explain different types of bioremediation.
22. Give an account on biological pest control.

(2×5=10 weightage)

