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Reg. No. : .....

Name : .....



Second Semester M.Sc. Degree Examination, September 2024

Botany

BO 222 : ENVIRONMENTAL BIOLOGY, FOREST BOTANY,  
PHYTOGEOGRAPHY AND CONSERVATION BIOLOGY

(2019 Admission Onwards)

Time : 3 Hours

Max. Marks : 75

(Draw diagrams wherever necessary)

- I. Answer the following questions.
1. Differentiate between mesophytes and epiphytes.
2. What is the first law of thermodynamics?
3. Define the term deme
4. Define ecotones
5. What are the features of Tundra Forests?
6. Name the districts with major distribution of mangroves in Kerala and in India.
7. What is the relevance of GIS in environmental studies?
8. Mention the uses of Sandal wood oil
9. What is meant by dynamic phytogeography?
10. Mention the importance of Remote sensing.

(10 × 1 = 10 Marks)

P.T.O.



II. Answer the following questions in not more than 50 words.

11. (a) Explain the term metapopulation.

OR

(b) Comment on interdemec extinctions.

12. (a) Describe the desert ecosystem of India.

OR

(b) Write notes on riparian ecosystems.

13. (a) How forests affect the nature of environment?

OR

(b) What are the consequences of industrialization?

14. (a) Give an account of Red data book.

OR

(b) Write about non-polluting energy systems.

15. (a) Explain the strategies for sustainable industrial development.

OR

(b) Write about major objectives of UNEP.

**(5 × 2 = 10 Marks)**

III. Answer the following questions in not more than 150 words.

16. (a) Explain different types of inter-specific competitions.

OR

(b) Differentiate between ecophenes and ecotypes.

17. (a) Describe the wild life sanctuaries in Kerala.

OR

(b) Give an account of Green-house effect and Ozone layer depletion.

18. (a) Write an account on the importance of environmental education and awareness.

OR

(b) Comment on tropical rain forests.

19. (a) Write about climate of India.

OR

(b) Explain continental drift hypothesis.

20. (a) Write notes on conservation of physical resources of the environment.

OR

(b) Explain IBP in detail.

21. (a) Explain various conventional and non-conventional resources of energy.

OR

(b) Give an account of various in-situ and ex-situ conservation strategies.

22. (a) Explain the strategies of Wildlife Preservation Act 1972.

OR

(b) Write about Gaia hypothesis.

**(7 × 5 = 35 Marks)**

IV. Answer the following questions in not more than **250** words.

23. (a) Write an essay on phyto-geographic regions of the world.

OR

(b) Give an account of Novel agricultural technologies.

24. (a) Give an account of major drivers of biodiversity change.

OR

(b) Describe various global environmental problems in detail.

**(2 × 10 = 20 Marks)**

