

MAR IVANIOS COLLEGE (AUTONOMOUS) THIRUVANANTHAPURAM

Reg. No. :....

Name :.....

Third Semester Career Related B.Sc. Degree Examination, November 2015

First Degree Programme under CBCSS

Core Course – IV: (for Botany and Biotechnology)

AUBB342: Environmental Studies and Phytogeography

Time: 3 Hours

Max. Marks : 80

SECTION – A

Answer ALL the following each in a word or as short notes.

- 1. Halophytes
- 2. Food web
- 3. Hot spots
- 4. Estuaries
- 5. Thermal Pollution
- 6. Pyramid of numbers
- 7. Endemic species
- 8. Ecological Niche
- 9. Eutrophication
- 10. Acid Rain

(10 × 1 = 10 Marks)

SECTION – B

Answer any EIGHT questions, not exceeding one paragraph.

- 11. Write note on ecological indicators.
- 12. Mangrove vegetation of Kerala.
- 13. Waste land reclamation.
- 14. Causes of landslides and disaster management during land slides.
- 15. Adaptations of xerophytes.

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- 16. Explain the significance of social forestry.
- 17. Differentiate between renewable and non renewable resources with appropriate examples.
- 18. National parks and wild life sanctuaries.
- 19. IPR.
- 20. What is ozone ? What are the problems related to ozone layer depletion ?
- 21. Anatomical adaptations of hydrophytes.
- 22. Grassland ecosystem.

(8 × 2 = 16 Marks)

SECTION – C

Short essay type : Answer any SIX questions.

- 23. "India is a mega diversity nation". Justify the statement.
- 24. Describe the growing energy needs and explain the need for alternate sources of energy.
- 25. Briefly explain the factors leading to greenhouse effect. Add a note on its control.
- 26. How does human activities impact soil erosion and desertification ?
- 27. What are the different mechanisms of solid waste management ?
- 28. Describe various types of Ecological succession.
- 29. Explain the causes, effects and control measures of air pollution.
- 30. How does energy flow in an ecosystem ? Explain with suitable examples.
- 31. Briefly describe the different Environment Protection Act.

 $(6 \times 4 = 24 \text{ Marks})$

SECTION – D

Long essay type : Answer any **TWO** questions.

- 32. Write an essay on aquatic ecosystems. Add a note on the plant succession in a pond.
- 33. Give a detailed account of the various phytogeographical regions of India with special emphasis on the vegetational types of India.
- 34. Describe various types of ecological pyramids with suitable examples.
- 35. What do you mean by population explosion ? Explain in detail the problems created by this and the various Family welfare programmes that can be adopted.

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(2 \times 15 = 30 \text{ Marks})
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