SEMESTER – V ENVIRONMENTAL STUDIES AND PHYTOGEOGRAPHY Course Code: BO1542

I. Write a short note on the following. All questions compulsory. $(10 \times 01 = 10)$

- 1. Edaphic factor
- 2. Ecotone
- 3. Xerophytes
- 4. Trophic level
- 5. Acid rain
- 6. Succession
- 7. UNEP
- 8. IPCC
- 9. WWF
- 10. Endemic species
- 11. Gene bank
- 12.Biotope
- 13. Stenohaline
- 14. Rill erosion
- 15. Gully erosion
- 16. Eutrophication
- 17. Contour farming
- 18. Alley cropping
- 19. Non-conventional source of energy
- 20. Mitigation
- 21. Social Forestry
- 22. Deforestation
- 23. Red data book
- 24. Xerophytes
- 25. Halophytes
- 26. Soil Profile
- 27. Commensalism
- 28. Pedogenesis
- 29. Autecology
- 30. Vivipary
- 31. Food web
- 32. Renewable energy

II. Answer any eight

 $(8 \times 2 = 16 \text{ marks})$

- 1. What are ecological pyramids?
- 2. Briefly describe energy flow in an ecosystem?
- 3. Write about the impacts of landslide?
- 4. Define Synecology.
- 5. What is Green house effect?
- 6. Explain the effects of Soil erosion.

- 7. Explain the role of decomposers in an ecosystem.
- 8. Describe components of Ecosystem.
- 9. What is meant by Vivipery? Where do you find it?
- 10. Mention Green house gases.
- 11. What is Global warming? Mention any 2 effects.
- 12. What is Biomagnification? Mention its effects.
- 13. Mention types of solid wastes.
- 14. What is Eutrophication? List its effects.
- 15. Write 4 adaptations of Halophytes.
- 16. What is velamen? Mention its significance.
- 17. What is Pneumatophore? Mention its function.
- 18. What is ecological Succession? Mention its types.
- 19. What is bio diversity? Mention its types.
- 20. What are Endemic species? Give example.
- 21. What is significance of Biodiversity conservation?
- 22. Mention any 4 values of Biodiversity.
- 25. What is IN-SITU and EX -SITU conservation.
- 26. Mention significance of Social forestry.
- 27. What is Biodiversity conservation? Mention its types.
- 28. What are endangered species? Give example.
- 29. What is Red data book? Mention its significance.
- 30. Mention biological methods of soil conservation.
- 31. What is meant by Aforestation and Reforestation?
- 32. Mention vegetaional types of India.
- 33. What is soil erosion? Mention its effects.
- 34. Explain MAB.
- 35. Write about Forest Conservation Act.
- 36. Enlist the effects of Earth quakes.
- 37. Explain Hotspots.
- 38. Write a note on Ramsar Sites.
- 39. Write short note on Chilka lake.
- 40. Define community. Write the analytical and synthetic characters use in community structure.
- 41. Write the steps of ecological succession. What do you mean by climax stage?
- 42. Define population. Write the characteristics of population.
- 43. Write the principles and models of energy flow in ecosystem.
- 44. Define biogeochemical cycle. Write down the nitrogen cycle.
- 45. Define endemism. Describe the theories of endemism.
- 46. Write the phytogeographical divisions of India with their local vegetation.
- 47. Distinguish between grazing and detritus food chain?
- 48. Distinguish between autogenic and allogenic succession.
- 49. Write 4 adaptive features from each hydrophytes and xerophytes.
- 50. What do you mean by continental drift?
- 51. Write down importance of soil conservation.
- 52. Write down the consequence of deforestation.

- 1. Explain different components of ecosystem.
- 2. Write about anatomical, morphological and physiological adaptations of xerophytes.
- 3. Write an account on the adaptations of mangroves.
- 4. Explain different stages of succession in a Hydrosere.
- 5. Define biogeochemical cycle. Explain Carbon cycle with a concept diagram.
- 6. Describe Nitrogen cycle phosphorous cycle.
- 7. Explain Forest ecosystem.
- 8. Explain grassland Ecosystem.
- 9. Explain Marine Ecosystem.
- 10. Give an account of adaptations In Hydrophytes.
- 11. Explain parasitic adaptations.
- 12. Explain process of Ecological Succession.
- 13. Give an account of Soil Pollution.
- 14. Write a note on Solid waste management.
- 15. What is Acid rain? Write note on its causes, effects control measures.
- 16.Explain Types of Biodiversity.
- 17. Give an account of Soil erosion.
- 18. Describe biological methods of soil conservation.
- 19. Write Mechanical methods of Soil conservation.
- 20. Benefits of soil conservation
- 21. Describe social forestry.
- 22. Explain soil erosion.
- 23. Explain mechanical methods of Soil conservation.
- 24. Explain the process of waste water management.
- 25. Explain nuclear hazards.
- 26. Explain the anthropogenic effect on flood and drought.
- 27. Explain sustainable development. Add a note on its significance.
- 28. Distinguish between grazing and detritus food chain?
- 29. Define biome. What type of vegetation is observed in tropical rain forests?
- 30. Write the principles and models of energy flow in ecosystem.
- 31. Define population. Write the characteristics of population.
- 32. Write an account on the non-renewable energy resources and their importance.
- 33. Describe biotic and abiotic components of a pond ecosystem.
- 34. Describe the methods used to control soil erosion.
- 35. Write an essay on Fresh water pollution and its effects and methods to control.

IV. Write essay on any two of the following.

 $(2 \times 15 = 30 \text{ marks})$

- 1. Explain different type of pollution.
- 2. Describe different types of Ecological pyramids with diagrams.
- 3. Explain concept of Ecosystem with reference to Grassland.
- 4. Describe process of Hydrosere.
- 5. Explain succession on barren rock (Xerosere)
- 6. What is Air pollution? Explain causes, effects and control measures of Air pollution.
- 7. Give an account of causes, effects and control measures of water pollution.
- 8. Explain Values of Biodiversity

- 9. Give an account of IN-SITU and EX-SITU conservation.
- 10. Give an account on Biodiversity conservation.
- 11. Explain phytogeographical regions of India.
- 12. Give an account on natural resources and their conservation.
- 13. Explain various phases of Disaster management.

