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## SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JULY 2016

(CUCSS-PG)

(Zoology)

## CC 15P ZO2 C05 - ECOLOGY AND ETHOLOGY

(2015 Admission)

Time: Three Hours

Maximum: 36 Weightage

- I. Answer *all* questions. Each question carries 1 weightage
  - 1. What is stimulus filtering?
  - 2. What is meant by a niche? Differentiate between realized and fundamental niche.
  - 3. Write the characteristics of Tundra biome.
  - 4. Comment on "Simpson Index". Add a note on its significance.
  - 5. What is meant by conditioning?
  - 6. Distinguish between "Symbiosis" and "Mutualism".
  - 7. What are Ecological Hotspots? Give two examples.
  - 8. What does Gamma diversity imply?
  - 9. What is ethogram? Give suitable example.
  - 10. What is meant by Environmental resistance?
  - 11. Distinguish between lentic and lotic habitat with suitable examples.
  - 12. Explain life tables.
  - 13. What are "Fixed Action Patterns"?
  - 14. Define climax community.

 $(14 \times 1 = 14 \text{ Weightage})$ 

- II. Answer any Seven questions. Each question carries 2 weightage
  - 15. Explain latitudinal gradients in diversity.
  - 16. Comment on cultural transmission of behaviour.
  - 17. Describe mineral cycling.
  - 18. Explain motivation studies in Guppies.
  - 19. Explain the objectives of Project tiger.
  - 20. Give an account of the Navigation cues employed by animals during migration.
  - 21. Explain the different types of Survivorship curves with examples.
  - 22. Describe the mechanism of ecological succession.
  - 23. Enumerate the ecological features and significance of K-selection.
  - 24. Give a summary of the impact of Radiation pollution.

 $(7 \times 2 = 14 \text{ Weightage})$ 

- III. Answer any two questions. Each question carries 4 weightage
  - 25. Give an account of the social organisation of Primates.
  - 26. Give an outline on the conservation and Management strategies in the Indian context.
  - 27. Explain with suitable examples the types of species interactions and its advantages.
  - 28. Explain the term biodiversity; describe alpha, beta and gamma diversity, and methods of measuring diversity.

 $(2 \times 4 = 8 \text{ Weightage})$ 

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