17P121

(Pages:2)

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2017

(Regular/Supplementary/Improvement)

(CUCSS-PG)

CC17P ZO1 C03 - ECOLOGY AND ETHOLOGY

(Zoology)

(2017 Admission regular)

Time: Three Hours

Maximum: 36 Weightage

- I. Answer all questions. Each question carries 1 weightage.
 - 1. Explain the concept of niche
 - 2. Explain life tables
 - 3. What is Carbon credit
 - 4. Discuss the negative aspects of Sethusamudram project
 - 5. Discuss character displacement with a suitable example
 - 6. Mention the advantages of remote sensing methods in ecological studies
 - 7. Explain latitudinal gradients in diversity
 - 8. Explain the characteristics of tundra
 - 9. What are social releasers
 - 10. Explain selfish gene theory
 - 11. Briefly explain FAP
 - 12. Discuss parental investment
 - 13. Explain orientation
 - 14. Write short notes on conflict behavior

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

- II. Answer any seven questions. Each question carries 2 weightage.
 - 15. Write a detailed account on the mechanism of ecological succession.
 - Describe Nitrogen cycle. Explain how anthropogenic interventions affect Nitrogen cycle.
 - 17. Explain the different biogeographical zones of India
 - 18. Explain the different methods of estimating population density of animals
 - 19. Describe the advantages and disadvantages of interlinking of rivers
 - 20. Give an account of r & k strategists
 - 21. Discuss the neural basis of learning and memory

- 22. Explain the different proximate and ultimate factors in behaviour
- 23. Give an account of different types of mating systems
- 24. Discuss J P Scott's categories of behaviour

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

- III. Answer any two questions. Each question carries 4 weightage
 - 25. Explain the principles of conservation. Give an account of major approaches to management
 - 26. Discuss ecosystem energetics and explain the different energy flow models.
 - 27. Explain the major types of species interactions with suitable examples.
 - 28. Write an essay on the role of hormones in regulating behaviour.

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

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