FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2018
(Regular/Supplementary/Improvement)
(CUCSS-PG)
CC17P ZO1 C03 – ECOLOGY AND ETHOLOGY
(Zoology)
(2017 Admission onwards)

Time: Three Hours   Maximum: 36 Weightage

I. Answer *all* questions. Each question carries 1 weightage.

1. Explain the laws which govern the flow of energy in an ecosystem.

2. Comment on the biogeography of North Eastern zone.

3. What are life tables?

4. What is Carbon trading?

5. Explain the 2 way energy flow diagram.

6. Differentiate between decomposers and detritivores with examples.

7. Explain Project Tiger.

8. Briefly explain the importance of Green building technology.

9. What is selfish gene theory?

10. Explain super normal stimulus with example.

11. Give a brief account of the visual cues during navigation.

12. Explain IRM.

13. Briefly explain reafference theory of Von Holst and Mittel Steadt.

14. What is conflict behaviour?

(14 x 1 = 14 Weightage)

II. Answer any *seven* questions. Each question carries 2 weightage.

15. Explain the major drivers of biodiversity change.

16. Explain resource partitioning with suitable examples.

17. Discuss the major reasons for latitudinal gradients in biodiversity.

18. Comment on the methods of estimating population density of animals.

19. Explain the important principles of conservation.

20. Explain the role of biological clocks in regulating animal life.

21. Explain the development of social behaviour in animals.

22. Give a brief account of cultural transmission of behavior.

23. Comment on the different mating systems in animals.

24. Explain the neural basis of learning, memory and cognition.

(7 x 2 = 14 Weightage)

III. Answer any *two* questions. Each question carries 4 weightage.

25. Explain the major population characteristics.

26. Write an essay on Nitrogen cycle. Comment on the human impact on Nitrogen cycle.

27. Explain the characteristics and biogeography of major terrestrial biomes.

28. Explain the effect of different hormones on animal behaviour.

(2 x 4 = 8 Weightage)

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