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Name:
Reg. No

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2019 (CUCSS PG) CC19P ZOL1 C03 – ECOLOGY AND ETHOLOGY (Zoology)

(2019 Admission Regular)

Time: Three Hours

Maximum: 30 Weightage

I. Answer any *four* questions.

- 1. Explain the concept of resource partitioning. How is it different from competitive exclusion principle?
- 2. Explain the concept of carbon credit and blue carbon.
- 3. Give an account of different reproductive strategies in a species.
- 4. Discuss the reasons for the latitudinal gradient in biodiversity.
- 5. Explain the different types of mating systems in animals.
- 6. Give an account of conflict behaviour.
- 7. Comment on the cultural transmission of behaviour.

(4 x 2 = 8 Weightage)

II. Answer any *four* questions.

- 8. Discuss the benefits and drawbacks of river interlinking in India.
- 9. Explain the mechanism of succession. Comment on climax.
- 10. Discuss the methods for estimating population density of animals.
- 11. Comment on the different interspecific interactions with suitable examples.
- 12. Write on J P Scott's behaviour categories. Explain the proximate and ultimate factors of behaviour.
- 13. Comment on the neural basis of learning, memory and cognition.
- 14. 'Behaviour is a reaction to stimuli'. Substantiate the statement.

(4 x 3 = 12 Weightage)

- III. Answer any *two* questions.
 - 15. Explain the role of hormones of gonads and pituitary glands in regulating different behaviour patterns.
 - 16. Explain the different biogeographical zones of India. Comment on the conservation issues and priorities.
 - 17. Explain ecosystem energetics. Comment on the different energy flow models.
 - Write an essay on the principles of conservation. Explain the major Indian case studies on biodiversity conservation.

(2 x 5 = 10 Weightage)

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