PG Odd Semester (CBCS) Exam., December—2016

ECOLOGY AND ENVIRONMENTAL SCIENCE

(3rd Semester)

Course No. : ECG–301 (C)

(Behavioural and Wildlife Ecology)

Full Marks : 75
Pass Marks : 30

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. Distinguish between territoriality and home range. What are the components of behaviour? Discuss the costs and benefits of territorial behaviour. 4+3+8=15

2. Write short notes on the following : 5×3=15

(a) Types of animal communication

(b) Supernormal stimuli

(c) History of ethology

UNIT—II

3. Give an account of social organization in invertebrates. 15

4. Discuss the following in brief : 7½+7½=15

(a) Optimal foraging and its constraints

(b) Short-term and long-term memory

UNIT—III

5. Define altruism. Give an account of altruism by kin selection with the help of Hamilton's rule citing suitable examples. 2+13=15

6. Write short notes on the following : 7½×2=15

(a) Cost and benefit of biparental care in birds

(b) Hypotheses associated with parental care

UNIT—IV

7. Mention the status and distribution of—

(a) elephant in India;

(b) Hoolock Gibbon in NE India.

Suggest some measures for their conservation. 7½+7½=15

8. Define the term 'protected area'. What are the different categories of protected areas? Mention the management strategies for conservation through protected area concept. 2+6+7=15

UNIT—V

9. Discuss in brief various radio and telemetry methods in monitoring wild animals. What are the objectives and functions of TRAFFIC international? 7+8=15

10. Write brief notes on the following : 7½×2=15

(a) IUCN red list categories

(b) Recognition of the Zoo Rule, 1992 and classification of Zoos

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