



2019/TDC/ODD/SEM/ZOOHCC-102T/036

TDC (CBCS) Odd Semester Exam., 2019

ZOOLOGY

(1st Semester)

Course No. : ZOOHCC-102T

(Principles of Ecology)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

UNIT—I

1. Answer any *two* of the following questions :

2×2=4

- (a) Who coined the term 'Ecology'? Define Autecology.
- (b) State different levels of organization in Ecology.
- (c) What is photoperiodism?

(2)



<http://www.elearninginfo.in>

(3)

2. (a) What is meant by limiting factor?
Discuss the law of minimum and law of tolerance with suitable illustrations. 1+5=6

Or

- (b) What are meant by poikilotherms and homeotherms? Give a short account on effects of temperature on the biota. 2+4=6

UNIT—II

3. Answer any two of the following questions :

2×2=4

(a) What is meant by survivorship curve? What are its types of survivorship curves?

(b) What is meant by carrying capacity?

(c) What is Ammensalism?

4. (a) Discuss different types of density-dependent factors in regulation of population size. 6

Or

(b) Discuss different types of positive interactions among organisms with suitable examples. 6

20J/1077

(Continued)

UNIT—III

5. Answer any two of the following questions :

2×2=4

(a) Differentiate between a biotic community and a biome.

(b) Define ecological succession.

(c) Give a brief note on dominance.

6. (a) What is meant by stratification? Discuss vertical stratification of communities in freshwater and marine habitats. 1+5=6

Or

(b) Discuss the climax concept in succession and the theories pertaining to climax community. 2+4=6

UNIT—IV

7. Answer any two of the following questions :

2×2=4

(a) What is trophic level? Why are the numbers of trophic levels limited in a food chain?

(b) What are detritus and grazing food chain?

(c) Define plankton. Classify planktons.

20J/1077

(Turn Over)



(4)

8. (a) Define ecosystem. Discuss pond as an example of ecosystem. 1+5=6

Or

- (b) Define biogeochemical cycle. Discuss the process of nitrogen cycle. 1+5=6

UNIT—V

9. Answer any *two* of the following questions :

2×2=4

- (a) What is biosphere reserve? Name one biosphere reserve of N-E India.

- (b) How does a sanctuary differ from a national park?

- (c) What are GIS and remote sensing?

10. (a) Discuss the strategies of wildlife conservation and management with special emphasis on *in-situ* and *ex-situ* modes of conservation. 6

Or

- (b) What is Project Rhino? Give a short account on present status of one-horned rhinoceros and its conservation measures in Assam. 1+5=6
