

2019

ZOOLOGY

(Major)

Paper : 2.2

(Ecology, Wildlife Conservation
and Management)

Full Marks : 60

Time : 3 hours

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

1. Choose the correct answer from the following : 1×7=7

(a) Autecology deals with

- (i) ecology of species
- (ii) ecology of community
- (iii) ecology of different species
- (iv) None of the above

- (b) Species that occur in different geographical regions separated by special barrier are
- (i) allopatric
 - (ii) sympatric
 - (iii) sibling
 - (iv) None of the above
- (c) The carrying capacity of a population is determined by its
- (i) mortality
 - (ii) natality
 - (iii) population growth rate
 - (iv) limiting resources
- (d) The animals whose distribution is restricted are called
- (i) endemic species
 - (ii) endangered species
 - (iii) sympatric species
 - (iv) None of the above
- (e) Cryopreservation is an example of
- (i) in situ conservation
 - (ii) ex situ conservation
 - (iii) Both of the above
 - (iv) None of the above

- (f) Wildlife Protection Act was implemented in India in
- (i) 1952
 - (ii) 1972
 - (iii) 1981
 - (iv) 1991
- (g) How many National Parks are found in Assam?
- (i) 1
 - (ii) 2
 - (iii) 3
 - (iv) 5

2. Answer the following :

2×4=8

- (a) Define ecotone.
- (b) "Zoo is an example of ex situ conservation." Justify the statement.
- (c) What are endemic animals? Give one example.
- (d) Why is keystone species always very important to an ecosystem?

3. Answer any *three* of the following :

5×3=15

- (a) Differentiate between habitat and niche.
- (b) Write a note on water pollution and its effect on human health.
- (c) "Encroachment is a cause of wildlife depletion." Explain.
- (d) Write a note on IUCN Red List categories.
- (e) What are the basic principles of wildlife conservation and management?

4. What is nutrient cycle? Explain the nitrogen cycle by mentioning the influences on human health. $1+7+2=10$

Or

Define wildlife. Highlight the importance of wildlife and explain the in situ and ex situ conservation strategy. $2+4+4=10$

5. What is productivity of an ecosystem? Describe the flow of energy within ecosystem by giving suitable diagram. $2+8=10$

Or

Define aggression. Explain the different protective behaviours adopted by Primates for maintaining their territoriality. $2+8=10$

6. Define pollution. What are the causes of air pollution? State how it can be prevented. $2+6+2=10$

Or

What is forest fragmentation? How the floras and faunas of Kaziranga National Park of Assam are facing dangers from various angles? What type of conservation measures should have to be adopted? $2+4+4=10$
