

UG 3rd Semester Examination 2021

ZOOLOGY (Honours)

Paper Code : DC 6-T

(Ecology and Conservation Biology)

[CBCS]

Full Marks:25

Time: 2 Hours

1. Answer *eight* questions taking *four* from *each* group.

$\frac{1}{2} \times 8=4$

(Group A: Ecology)

- (a) Law of tolerance states that the growth of population could be regulated by the scarcest resource. (True/False).
- (b) A transition area between two biological communities is called _____ (Fill in the blank).
- (c) Pyramid of energy is always _____ (Inverted/Upright).
- (d) In ecological succession, the initial community is known as _____ (Fill in the blank)
- (e) Nitrogen or carbon cycle is known as _____ cycle. (Fill in the blank)
- (f) The ecology related to study of a particular species is known as _____. (Fill in the blank)

(Group B: Conservation Biology)

- (g) Indian wildlife act came into force in the year _____ (Fill in the blank).
- (h) Jim Corbett National Park is famous for being a home to _____ (Fill in the blank).
- (i) Give one example of biodiversity hotspot in India.
- (j) Expand WWF.
- (k) Biosphere Reserve is an example of *in situ* conservation (True/False).
- (l) Who coined the term 'biodiversity'?

2. Answer *two* questions taking *one* from *each* group.

$2\frac{1}{2} \times 2=5$

(Group A: Ecology)

- (a) Differentiate 'r' and 'k' selected species.
- (b) Explain the term mutualism with an example.

(Group B: Conservation Biology)

- (c) What is keystone species? Give an example.
- (d) How is national park different from sanctuary?

3. Answer *four* questions taking *two* from *each* group.

4 × 4=16

(Group A: Ecology)

- a. Give an explanatory note on 'J' shaped curve.
- b. Explain briefly the concept of species abundance and species richness?
- c. Discuss in brief the competitive exclusion principle by Gause.
- d. Write a short note on ecological pyramid.

(Group B: Conservation Biology)

- e. Give a brief account on the levels of biodiversity.
- f. Write a short note on "Project Lion".
- g. Write about *ex situ* conservation with examples.
- h. State the causes of loss of wild life in India.