

5 SEM TDC ZOO M 5

2014

(November)

ZOOLOGY

(Major)

Course : 505

(Environmental Biology and Wildlife)

Full Marks : 48

Pass Marks : 19

Time : 2 hours

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

1. Fill in the blanks : 1×5=5

(a) Each step of food chain is known as _____.

(b) The maximum capacity of an organism to reproduce or increase in number is termed as _____.

(c) The terminal stage of succession is represented by _____.

(d) In order to control environmental pollution, the Government of India has passed the Environment Protection Act in the year —.

(e) The scientific name of Ganges dolphin is —.

2. Distinguish between (any two) : $3 \times 2 = 6$

(a) Carbon cycle and Nitrogen cycle

(b) Renewable and Non-renewable natural resources

(c) Keystone species and Critical link

3. Write short notes on (any two) : $4 \times 2 = 8$

(a) Ecological backlash

(b) Diversity of ecological or ecosystem level

(c) Ozone hole

(d) Indian Wildlife Protection Act, 1972

4. Justify the following with proper write-up (any two) : $4 \times 2 = 8$

(a) Agrochemicals are used for crop production but it creates environmental problem.

(b) Pyramid of energy is always upright but pyramid of number and biomass are upright and inverted.

(c) Trophics have more species or greater biodiversity.

5. Define population ecologically with examples. Give a brief note on various characteristics of a population. Mention the four basic processes responsible for changes in a population density. $2+6+2=10$

Or

(a) How energy flow in ecosystem obeyed two laws of thermodynamics? Discuss the important features of energy flow through various trophic level and 10% law. $2+4=6$

(b) Mention the criteria used for determining biodiversity hot spot. Name the biodiversity hot spot regions of India. $3+1=4$

6. Give a critical note on enhanced greenhouse effect and global warming. Mention the strategies to reduce greenhouse effect. $5+6=11$

Or

Give the definition of environmental pollution. Differentiate primary and secondary air pollutant with examples and give a note on their harmful effects. $1+6+4=11$
