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(November)

ZOOLOGY

(Major)

Course : 505

(Environmental Biology and Wildlife)

Full Marks : 48

Pass Marks : 19/14

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) Methane and nitrous oxide are two
important _____ gases.

(c) Zoos and botanical gardens are the
means for _____ conservation.

(2)

(d) Eutrophication causes reduction in ____.

(e) The community at the final stage of ecological succession is known as ____ community.

2. Distinguish between any *two* of the following : 4×2=8

(a) 'r' and 'k' strategies

(b) Carbon cycle and Nitrogen cycle

(c) Natality and Mortality

3. Write short notes on any *two* of the following : 5×2=10

(a) Lotka-Volterra model

(b) Ecological backlash

(c) Non-renewable resources of North-East India

4. Define food chain and food web. Explain why the sun is considered the only source of energy of ecosystems. (2+2)+4=8

Or

Define biome and ecotone. Give a brief account of the major biomes of the world.

(2+2)+4=8

(3)

5. What is meant by productivity of an ecosystem? Write brief notes on primary, secondary and net productivity. $2+6=8$

Or

What is predation? Discuss the importance of predator-prey relationship in maintaining balance in a particular niche. $2+6=8$

6. What is biodiversity hot spot? Mention the criteria used for determining biodiversity hot spot. Name the biodiversity hot spot regions of India. $3+4+2=9$

Or

Write short notes on the following : $3 \times 3 = 9$

- (a) Golden langur
- (b) Conservation of rhinoceros in Assam
- (c) National parks of North-East India

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