



## Standard 12

Time: 1.30 Hrs.

## BIOLOGY

Marks: 35

## BIO - BOTANY

Marks: 18

## PART - I

## I. Choose the best answer:

3×1=3

- 1) A specific place in an ecosystem, where an organism lives and performs its function is
  - a) Habitat
  - b) Niche
  - c) Landscape
  - d) Biome
- 2) Ecosystem consists of
  - a) Decomposers
  - b) Producers
  - c) Consumers
  - d) All of the above
- 3) The unit for measuring ozone thickness
  - a) Joule
  - b) Kilos
  - c) Dobson
  - d) Watt

## PART - II

## II. Answer ANY TWO of the following:

2×2=4

[Q.No. 4 is compulsory question]

- 4) What are ecological equivalents? Give one example.
- 5) Productivity of profundal zone will be low. Why?
- 6) What is ozone hole?

## PART - III

## III. Answer ANY TWO of the following:

2×3=6

[Q.No. 7 is compulsory question]

- 7) What is Albedo effect and write their effects?
- 8) Pyramid of energy is always upright. Give reasons.
- 9) Define Dobson unit.

## PART - IV

## IV. Answer the following:

1×5=5

- 10) How does anemochory differ from zoochory?

(OR)

Shape of pyramid in a particular ecosystem is always different in shape. Explain with example, and a neat diagram.

## BIO - ZOOLOGY

Marks: 18

## SECTION - I

## I. Answer all questions:

3×1=3

- 1) The first clinical gene therapy was done for the treatment of \_\_\_\_\_.  
a) AIDS                      b) Cancer                      c) Cystic fibrosis                      d) SCID
- 2) Arrange the correct order of PCR technique \_\_\_\_\_.  
a) Denaturation, Annealing and Extension  
b) Annealing, Denaturation and Extension  
c) Extension, Annealing and Denaturation  
d) Denaturation, Extension and Annealing
- 3) Which of the following is stenotherms \_\_\_\_\_.  
a) Fish                      b) Cat                      c) Dog                      d) Tiger

## SECTION - II

## II. Answer ANY TWO of the following:

2×2=4

- 4) Differentiate Germline genetherapy and Somatic cell genetherapy.
- 5) What is meant by Totipotency?
- 6) Define Van't hoff rule?

## SECTION - III

## III. Answer ANY TWO of the following:

2×3=6

(Q.No. 9 is compulsory)

- 7) What is Acclimation?
- 8) Explain Hiberation and Aestivation with examples.
- 9) Why saccharomyces cerevisiae is suitable for the production of interferons?

## SECTION - IV

## IV. Answer ANY ONE of the following:

1×5=5

- 10) Write down the clinical application of PCR.

(OR)

Explain the properties of soil

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விலை.