# **SECOND MID TERM TEST - 2024**

## Standard - XII

Time: 1.30 hrs

### **BIOLOGY**

**Bio-Botany** Section - I

Marks: 25

Marks: 50

5×1=5

### I. Answer, all the questions:

- (1) Pedogenesis refers to
  - a) Fossils
- b) Water
- c) Population
- d) Soil

- 2) Size of the Sandy soil
  - a) Less than 0.002mm
  - c) 0.002 to 2 mm
- 3) Net Primary productivity is
  - a) NPP = GPP Respiration
- b) GPP = NPP Respiration

b) 0.002 to 0.02mm

d) 0.2 to 2 mm

- c) Respiration = NPP GPP
- d) NPP = GPP + Respiration
- 4) Solar energy used by green plants for photosynthesis is only

  - a) 2-8% b) 2-10%
- c) 3-10%
- d) 2-9%
- 5) The unit for measuring ozone thickness
  - a) Joule b) kilos
- c) Dobson
- d) Watt

#### **Section - II**

## II. Answer any three of the following:-

3×2=6

- 6) State any two effects of deforestation.
- 7) Explain Ex-situ conservation.
- 8) Construct the food chain with the following data and what is the type of food

Earthworm, Hawk, Black bird, Fallen leaves.

- 9)\What is Myrmecophily?
- 10) What are true xerophytes.

#### **Section - III**

## III. Answer any three of the following. Questions No.14 is compulsory $3\times3=9$

- 11) What are Rhytidome.
- 12) Explain 10 percent law with suitable examples.
- 13) Differentiate between primary and secondary succession.
- 14) How do sacred groves help in the conservation of biodiversity?
- 15) State the effects of Global Warming on Plants.

#### Section - IV

### IV. Answer the following question:-

 $1 \times 5 = 5$ 

- 16) a) Explain different types of hydrophytes with examples.
  - b) How the pond ecosystem is making itself self sufficient and self regulating.

(2) Bio-Zoology Section - I XII BIOLOGY
Marks: 25

#### I. Answer all the questions.

 $5 \times 1 = 5$ 

- 1) Who introduced the term Biodiversity?
  - a) Edward Wilson b) Walter Rosen c) Norman Myers d) Alice Norman
- Assertion: The environmental conditions of the tropis are favourable for speciation and diversity of organisms.

Reason: The climate seasons, temperature, humidity and photoperiod are more or less stable and congenial

- a) Both Assertion and Reason are true and Reason explains Assertion correctly
- Both Assertion and Reason are true and Reason is not the correct explanation of Assertion.
- c) Assertion is true, but Reason is false
- d) Both Assertion and Reason are false.
- 3) How many amino acids are arranged in the two chains of Insulin?
  - a) Chain A has 12 and Chain B has 13 amino acids
  - b) Chain A has 21 and Chain B has 30 amino acids
  - c) Chain A has 20 and Chain B has 30 amino acids
  - d) Chain A has 12 and Chain B has 20 amino acids
- 4) The relationship between sucker fish and shark is
- a) competition b) commensalism c) predation d) Parasitism

c) Bear

- 5) Which one of the animal is example for hibernation.
  - a) fishes
- b) snails

d) Dogs

#### Section - II

## II. Answer any three of the following:-

 $3\times2=6$ 

- 6) What is Humulin?
- 7) What are transgenic animals? Give examples?
- 8) Define Mortality?
- 9) Write a note on WWF.
- 10) "Amazon forest is considered to be the lungs of the planet" Justify this statement.

#### Section - III

## III. Answer any three of the following and Question No.14 is compulsory. 3×3=9

- Differentiate between somatic cell gene therapy and germ line gene therapy.
- 12) "Red data Book"? What do you know about it?
- 13) Explain Bergamm's rule.
- 14) Describe population Age distribution.
- 15) Write the types of aquatic biomes of earth.

#### Section - IV

IV. Answer the following question:

16) a List the adaptations seen in terrestrial animals.

b) Explain the steps which are involved in PCR.

1×5=5

(OR)

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