

**Standard 11
BIOLOGY**

Marks: 50

Time: 1.30 Hrs.

PART - I [BIO-BOTANY]

Marks: 25

Section - I

Note: 1. Answer all the questions.

5 × 1 = 5

2. Choose the correct answers and write it with their options.

- 1) The haploid number of chromosome for an angiosperm is 14, the number of chromosome in its endosperm would be
a) 28 b) 56 c) 14 d) 42
- 2) Roots are
a) Descending, positively geotropic, negatively phototropic
b) Ascending, positively geotropic, negatively phototropic
c) Descending, negatively geotropic, positively phototropic
d) Ascending, positively phototropic, negatively geotropic
- 3) The correct statement regarding Blue Green Algae is
a) presence of floridean starch
b) Lack of motile structures
c) presence of cellulose in cellwall
d) absence of mucilage around the thallus
- 4) Of the following which is not an underground stem modification?
a) Rhizome b) Corn c) Sucker d) Tuber
- 5) Which group of fungi popularly called as 'sac fungi'?
a) Oomycetes b) Basidiomycetes
c) Ascomycetes d) Zygomycetes

Section - II

Answer ANY THREE of the following questions:

3 × 2 = 6

- 6) Why do farmers plant leguminous crops in crop rotations?
- 7) What do you infer from the term 'pycnoxylic'?
- 8) Write the similarities and differences between Avicennia and Trapa.
- 9) What is agar-agar? From which algae it is obtained?
- 10) What is liana?

Section - III

Answer ANY THREE of the following questions.

3 × 3 = 9

Q.No. 15 is compulsory.

- 11) What are the importance of mycorrhizae?
- 12) Differentiate: Haplontic and Diplontic life cycle
- 13) Do you agree with the statement 'Bryophytes need water for fertilization'? Justify your answer.
- 14) Name any six bacterial diseases in human.
- 15) Draw and label the parts of regions of root.

Section - IV

Answer the following:

1 × 5 = 5

- 16) Write the distinguishing features of monera.

(OR)

What is protostele? Explain the types with examples.

Kindly send me your study materials to padasalai.net@gmail.com

PART - II [BIO-ZOOLOGY]

Marks: 25

Part - A

Choose the correct answer:

5 × 1 = 5

- 1) Who coined the term biodiversity?
 - a) Aristotle
 - b) Candole
 - c) Walter Rosen
 - d) Tansley
- 2) Metameric segmentation is the main feature of
 - a) Annelida
 - b) Arthropoda
 - c) Echinodermata
 - d) Coelenterata
- 3) Which of the following is not correctly paired?
 - a) Humans - Ammonotelic
 - b) Birds - Uricotelic
 - c) Lizards - Uricotelic
 - d) Whale - Ureotelic
- 4) Name the tissue layer, enhances night time vision in most of the animals.
 - a) Tapetum lucidum
 - b) Tapetum corneum
 - c) Tapetum granulosum
 - d) Tapetum spinosum
- 5) Which of the following have the highest number of species in nature?
 - a) birds
 - b) insects
 - c) angiosperms
 - d) fungi

Part - B

Answer ANY THREE of the following:

3 × 2 = 6

- 6) Differentiate between probiotics and pathogenic bacteria.
- 7) What are earthworm casts?
- 8) What are the four characteristics common to most animals?
- 9) Write the scientific name of our national bird and animal.
- 10) What is biopsy?

Part - C

Answer ANY THREE of the following:

3 × 3 = 9

[Compulsory question no. 12]

- 11) What is pseudostratified epithelium?
- 12) Write any three differences between chordates and nonchordates.
- 13) What is clitellum?
- 14) List the functions of airbladder in fishes.
- 15) Why mule is sterile in nature?

Part - D

Answer any one of the following:

1 × 5 = 5

- 16) Explain classical taxonomical tools.

(OR)

List the characteristic features that distinguish cartilaginous fishes with living jawless fishes.