

1722.

COMMON HALF YEARLY EXAMINATION - 2024

*

Standard XI

Reg.No.

--	--	--	--	--	--

BIOLOGY

Time : 3.00 hrs

Part - I

Marks : 70

(Bio-Botany) - 35 marks

Section - A

V. Navaneetha Krishnan

XI, B, Pm 8 x 1 = 8

Sri, Sankara

I. Choose the correct answer:

1. Identify the Archaeobacterium

a) Acetobacter

b) Erwinia

c) Treponema

d) Methanobacterium

2. Which of following represents gametophytic generation in Pteridophytes?

a) Prothallus

b) Thallus

c) Cone

d) Rhizophore

3. Vexillary aestivation is characteristic of the family

a) Fabaceae

b) Asteraceae

c) Solanaceae

d) Brassicaceae

4. Sequences of which of the following is used to know the phylogeny

a) mRNA

b) rRNA

c) tRNA

d) HnRNA

5. In meiosis crossing over is initiated at

a) Diplotene

b) Leptotene

c) Pachytene

d) zygotene

6. Stomata of a plant open due to

a) Influx of K⁺b) Efflux of K⁺c) Influx of Cl⁻d) Influx of OH⁻

7. Which Chlorophyll molecule does not have a phytol tail?

a) Chl-a

b) Chl-b

c) Chl-c

d) Chl-d

8. Consider the following statements.

In spring season Vascular cambium.

(i) is less active

(ii) Produces a large number of xylary elements.

(iii) Forms, Vessels with wide cavities of these,

a) (i) is correct but (ii) & (iii) are not correct

b) (i) is not correct but (ii) & (iii) are correct

c) (i) & (ii) are correct but (iii) is not correct

d) (i) & (ii) are not correct but (iii) is correct.



2

Section - B

XI Biology

II. Answer any 4 questions. (Q.No.14 is compulsory)

9. What is plectostele ? Give Example? 4 x 2 = 8
10. Differentiate Racemose and Cymose?
11. Why the cells of Sclerenchyma and tracheids became dead?
12. In which season the vessels of angiosperms are larger in size? why?
13. A tree is believed to be releasing oxygen during night time. Do you believe the truthfulness of this statement? Justify your answer by giving reason.
14. Draw and label the structure of stomata?

Section - C

III. Answer any 3 questions. (Q.No.19 is compulsory)

3 x 3 = 9

15. State the Protoplasm theory.
16. Give an account of Gophase.
17. Differences between Sapwood and Heartwood.
18. Write the role of nitrogenase enzyme in nitrogen fixation?
19. Draw and label the parts of regions of root.

Section - D

IV. Answer all the questions.

2 x 5 = 10

20. a) Explain the different types of placentation with example.

(OR)

- b) Give the floral characters of *Clitoria ternatea*.

21. a) i) Briefly explain Tyloses ii) Explain the path of Ascent of sap.

(OR)

- b) Differences between C3 and C4 plants.

3

Part - II

(Bio-Zoology) - 35 marks

Section - A

B × 1 = 8

I. Choose the correct answer:

- Which of the following have the highest number of species in nature?
 a) Insects b) Birds c) Angiosperms d) Fungi
- First step in digestion of fat is _____.
 a) Emulsification b) Enzyme action
 c) Absorption by lacteals d) Storage in adipose tissue
- Which of the following pairing is correct? ;
 a) sensory nerve - afferent b) Motor nerve - afferent
 c) sensory nerve - ventral d) Motor nerve - dorsal
- The respiratory centre is present in the .
 a) Medulla oblongata b) Hypothalamus c) Cerebellum d) Thalamus.
- To which blood group does a person have A and B antigens on the surface of erythrocytes?
 a) A b) B c) AB d) O
- Which of the following is correctly matched?
 a) Physalia - Portuguese man of war
 b) Pennatula - Sea fan
 c) Adamsia - Sea pen
 d) Gorgonia - Sea anemone.
- Rearing of honeybee is called _____.
 a) Sericulture b) Lacculture c) Vermiculture d) Apiculture
- The tidal volume of a normal person is _____.
 a) 500 ml b) 800 ml c) 1100-1200 ml d) 1200 ml

4

XI Biology

Section - B

II. Answer any 4 questions. (Q.No.14 is compulsory)

4 x 2 = 8

9. What are worm castings?
10. Differentiate male frog from female frog.
11. Why pseudostratified epithelium is so called? Give reason.
12. How is tetany caused?
13. List two - characteristic features of bony fishes.
14. Why blood is considered as typical connective tissue?

Section - C

III. Answer any 3 questions. (Q.No.18 is compulsory)

3 x 3 = 9

15. Write any 3 uses of continuous exercises.
16. What is acute mountain sickness?
17. Draw the neat labelled diagram of L.S. of kidney of human.
18. What is anastomoses? -
19. Differentiate flame cells from stinging cells (cnidoblast cells)

Section - D

IV. Answer all the questions.

2 x 5 = 10

20. a) Write a short notes on the following terms.
- i) Clitellum ii) Sarcomere iii) Chemical messengers
- iv) Acromegaly v) Melatonin and Serotonin

(OR)

b) Draw and label the diagram of human eye.

21. a) Write the basic rules of nomenclature

(OR)

b) What are the effects of Smoking?
