

**Class : 11**Register  
Number

1 1 3 1 7

**COMMON HALF YEARLY EXAMINATION - 2024 - 25**

Time Allowed : 3.00 Hours]

**BIOLOGY**

Part - I (Bio-Botany) (Marks : 35)

[Max. Marks : 70

**SECTION - I**

Note. (i) Answer All the questions.

(ii) Choose the most appropriate answer from the given four alternatives and write the option code and corresponding answer. 8×1=8

1. Identify the Archaeobacterium  
a) Acetobacter                      b) Erwinia                      c) Treponema                      d) Methanobacterium.
2. In gymnosperms endosperm is formed  
a) At the time of fertilization                      b) Before fertilization  
c) After fertilization                      d) Along with the development of Embryo
3. Vexillary aestivation is characteristic of the family.  
a) Fabaceae                      b) Asteraceae                      c) Solanaceae                      d) Brassicaceae.
4. The sub units of prokaryotic ribosomes is  
a) 40S + 60S                      b) 70S + 30S                      c) 60S + 30S                      d) 30S + 50S
5. The correct sequence in cell cycle is  
a) S-M-G1-G2                      b) S-G1-G2-M                      c) G1-S-G2-M                      d) M-G-G2-S.
6. The common bottle cork is a product of  
a) Xylem                      b) Phellem                      c) Vascular bundle                      d) Phellogen.
7. For every CO<sub>2</sub> molecule entering the C<sub>3</sub> cycle, the number of ATP & NADPH required.  
a) 2 ATP + 2 NADPH                      b) 2 ATP + 3 NADPH                      c) 3 ATP + 2 NADPH                      d) 3 ATP + 3 NADPH
8. In uni sexual plants, sex can be changed by the application of  
a) Ethanol                      b) Cytokinins                      c) ABA                      d) Auxin

**SECTION - II**

II. Answer any four questions.

9. What is prion? 4×2= 8
10. What do you infer from the term pycnoxylic?
11. Draw the plant cell and label it.
12. Define Enzyme.
13. What is Plasmolysis?
14. What is Bolding?

**SECTION - III**III. Answer any three questions.(Q.N. 19.is compulsory ) 3×3= 9

15. Write the importance of Mycorrhizae.
16. What is author citation.?
17. Differentiate between Sap wood and Heart wood.
18. Write a note on Hydroponics.
19. What are the physiological effects of Gibberellins.

**SECTION - IV**IV. Answer all the questions. 2×5=10

20. Explain the different types of Placentation with example.

(OR)

Write the floral description of Clitoria ternatea.

21. Make a chart of Glycolysis pathway (EMP pathway).

(OR)

What are differentiate between cyclic and Non cyclic photophosphorylation.

TPR/ 11 /J/ Bio / 1

**PART – II ( BIO-ZOOLOGY) (Max. Marks: 35)**  
**SECTION - I**

**Note: 1. Answer all the questions**

**2. Choose the most suitable answer from the given four alternatives and write the option code and the corresponding answer**

**8x1=8**

1. Molecular taxonomic tool consists of
  - a) DNA and RNA
  - b) Mitochondria and Endocoplamic reticulum
  - c) Cell wall and Membrane proteins
  - d) All the above
2. Enterokinase takes part in the conversion of
  - a) Pepsinogen into pepsin
  - b) Trypsinogen into trypsin
  - c) Protein into polypeptide
  - d) Caseinogen into casein
3. Vital capacity is
  - a) TV + IRV
  - b) TV + ERV
  - c) RV + ERV
  - d) TV + IRV + ERV
4. Angiotensinogen is synthesized by
  - a) Glomerulus
  - b) Atrial cell of heart
  - c) Liver
  - d) adrenal cortex
5. ATPase enzyme needed for muscle contraction is located in
  - a) actinin
  - b) troponin
  - c. myosin
  - d. actin
6. Sleep and wake cycle is regulated by
  - a) Pituitary gland
  - b) Thalamus
  - c) Pineal body
  - d) Hypothalamus
7. The structure which connects the hypothalamus with anterior lobe of pituitary gland is the
  - a) Dendrites of neuro hypophysis
  - b) Axons of neurohypophysis
  - c) Bands of white fibers from cerebellar region
  - d) Hypophyseal portal system
8. Isinglass is used in
  - a) Preparation
  - b) Clearing of wines
  - c) Distillation of wines
  - d) Preservation of wines

**SECTION - II**

**II. Answer any four of the following questions.**

**4x2=8**

9. What is Tautonymy?
10. Some epithelia are pseudostratified. What does this mean?
11. Define - BMI
12. What are heart sounds? Where and how are these sounds produced?
13. What is Blind spot?
14. Write the functions of (CCK) Cholecystokinin.

**SECTION - III**

**III. Answer any three of the following questions. Question No. 19 is Compulsory.**

**3x3=9**

15. Differentiate Protostomia and Deuterostomia.
16. Why do you call cockroach a pest?
17. How the body makes long – term adjustments when living in high altitude?
18. Differentiate cortical nephrons from medullary nephrons.
19. What are the advantages of artificial insemination?

**SECTION - IV**

**IV. Answer the following questions.**

**2x5=10**

20. Differentiate the Chordate animals from non-chordate animals.

OR

Enumerate the schematic presentation of muscle contraction.

21. Explain the sensory receptors present in the skin

OR

Discuss the various techniques adopted in cattle breeding?

TPR / 11 / J/Bio / 2