Tsi11Bio

Tenkasi District
Common Quarterly Examination - 2024

Standard 11

BIOLOGY

Time Allowed: 3.00 Hours | Maximum Marks: 70

BIO-BOTANY

Marks: 35

I. Answer all the questions: **8×1=8**

1) Locomotory organs are absent in
   a) Chlamydomonas b) Animals
   c) All Bacteria d) Blue Green Algae
2) The type of stele present in the plant Lycopodium clavatum
   a) Sphanostele b) Plectostele c) Atactostele d) Eustele
3) Example for Phylloclade
   a) Opuntia b) Asparagus c) Acacia d) Bryophyllum
4) The type of fruit formed from multicarpellary, apocarpus ovule
   a) Composite fruit b) Fleshy fruit c) Aggregate fruit d) Pseudocarp
5) Which plant of the following has perianth?
   a) Clitoria ternatia b) Datura metal
   c) Allium cepa d) Pongamea pinnata
6) Constricted DNA is called _____.
   a) Thylakoids b) Cristae c) Cisternae d) Chromatin
7) In which phase of cell division the DNA content is doubled?
   a) S phase b) G1 phase c) G2 phase d) M phase
8) Charge of the Zwitterion is
   a) zero b) positive c) negative d) 100

II. Answer any 4 from the following: **4×2=8**

9) What is Synapsis?
10) Write the importance of scanning electron microscope.
11) Write the floral formula of Datura metel.
12) What is Syngenicious?
13) Write any two properties of water.
14) What is Haustorial roots?

III. Answer any 3 from the following: **3×3=9**

[Q.No. 19 is compulsory]

15) Write any three characters of cyanophyceae.
16) Write about Pitcher plant.
17) What is Balasta? Give example.
18) Differentiate Nucleoside and Nucleotide.
19) Draw the floral diagram of Clitoria ternatea.

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

20) a) Explain the structure of DNA. **(OR)**
    b) Differentiate between cytokinesis in plant cell and cytokinesis of animal cell.
21) a) Differentiate Prokaryotes and Eukaryotes. **(OR)**
    b) Explain the botanical description of Datura metel.

BIO-ZOOLOGY **Marks: 35**

I. Choose the correct answer: **8×1=8**

1) Cladogram considers the following characters
   a) Physiological and Biochemical b) Evolutionary and Phylogenetic
   c) Taxonimic and Systematic d) None of the above

2) **Match the following columns and select the correct option:**

Column - I		Column - II
p) Pila	-	i) Devil fish
q) Dentalium	-	ii) Chiton
r) Chaetopleura	-	iii) Apple snail
s) Octopus	-	iv) Tusk shell

   a) p-(ii), q-(i), r-(iii), s-(iv) b) p-(iii), q-(iv), r-(ii), s-(i)
   c) p-(ii), q-(iv), r-(i), s-(iii) d) p-(i), q-(ii), r-(iii), s-(iv)

3) Prevention of substances from leaking across the tissue is provided by
   a) Tight junction b) Adhering junction
   c) Gap junction d) Elastic junction

4) Buccopharyngeal respiration in frog
   a) is increased when nostrils are closed
   b) stops when there is pulmonary respiration
   c) is increased when it is catching fly
   d) stops when mouth is opened

5) Which of the following is not the function of liver?
   a) Production of insulin b) Detoxification
   c) Storage of glycogen d) Production of bile

6) After a long deep breath, we do not respire for some seconds due to
   a) more CO_2 in the blood b) more O_2 in the blood
   c) less CO_2 in the blood d) less O_2 in the blood

7) A patient's chart reveals that he has a cardiac output of 7500 ml, per minute and a stroke volume of 50 ml. What is his pulse rate [in beats / min]
   a) 50 b) 100 c) 150 d) 400

8) What will happen if the stretch receptors of the urinary bladder wall are totally removed?
   a) Micturition will continue
   b) Urine will be continue to collect normally in the bladder
   c) There will be micturition
   d) Urine will not collection the bladder

II. Answer ANY FOUR of the following: **4×2=8**

9) Distinguish between open and closed circulation.
10) Calculate the vital capacity using the following data:
    Expiratory Reserve volume : 1100 ml
    Tidal volume : 7000 ml
    Inspiratory reserve volume : 3000 ml
11) Why are villi present in the intestine and not in the stomach?
12) Write the types of respiration seen in frog.
13) Differentiate white adipose tissue from brown adipose tissue.
14) What are flame cells?

III. Answer ANY THREE of the following: [Q.No. 19 is compulsory] **3×3=9**

15) What is the difference between a zoo and wild life sanctuary?
16) Write the characteristics that contributes to the success of reptiles on land.
17) Differentiate between elastic fibres and elastic connective tissue.
18) Comment on the functions of alary muscles.
19) Draw and label the Nerve cell.

IV. Answer the following: **2×5=10**

20) What are the Rules of Nomenclature? **(OR)**
    Explain the fundamental distinct features of Chordates.
21) Explain the mechanism of Breathing. **(OR)**
    Explain the origin and conduction of heart beat.