

Tsi11Bio

Tenkasi District

Common Second Revision Test - 2025



## Standard 11

## BIOLOGY

Time Allowed: 3.00 Hours

Maximum Marks: 70

Marks: 35  
8×1=8

## PART - I [BIO-BOTANY]

## I. Answer all the questions:

- 1) Which of the following has DNA or RNA as genetic material?  
a) Virus                      b) Bacteria                      c) Fungi                      d) Bryophytes
- 2) Which of the plant part shows Descending, Positively geotropic, negatively phototropic?  
a) Stem                      b) Root                      c) Seed                      d) Leaf
- 3) Perianth is present in  
a) Allium cepa                      b) Clitoria ternatea                      c) Datura metel                      d) Pongamia pinnata
- 4) Damaged cells must be replaced by \_\_\_\_\_ cell division.  
a) Reduction division                      b) Meiosis                      c) Mitosis                      d) Amitosis
- 5) Adhesion and Cohesion property is seen in \_\_\_\_\_.  
a) Mercury                      b) Ethanol                      c) Water                      d) Wax
- 6) Match the following:  
a) Brachy sclereids - i) Crotalaria  
b) Macro sclereids - ii) Pulp of Pyrus  
c) Osteo sclereids - iii) Tea  
d) Astero sclereids - iv) Pisum  
e) Trcho sclereids - v) Nympha leaves  
a) a(ii), b(iv), c(i), d(iii), e(iv)                      b) a(iii), b(iv), c(ii), d(i), e(v)  
c) a(i), b(ii), c(iv), d(v), e(iii)                      d) a(ii), b(i), c(iv), d(iii), e(v)
- 7) In which family the given aestivation is present?



- a) Fabaceae                      b) Solanaceae  
c) Liliaceae                      d) Asteraceae
- 8) If the diameter of the pulley is 6 inches, length of pointer is 10 inches and distance travelled by pointer is 5 inches. Calculate the actual growth in length of plant.  
a) 3 inches                      b) 6 inches                      c) 12 inches                      d) 30 inches

## II. Answer any 4 from the following:

4×2=8

- 9) Write about Programmed Cell Death. (PCD)
- 10) Grass have an adaptive mechanism to compensate photorespiratory losses - Name and describe the mechanism.
- 11) Write a note on Drosera.
- 12) In which season the vessels of angiosperms are larger in size, why?
- 13) What are the types of RNA?
- 14) Write any two important characters of Protista.

## III. Answer any 3 from the following: (Q.No. 19 is compulsory)

3×3=9

- 15) Differentiate Exarch and Endarch.
- 16) Differentiate RER and SER.
- 17) Write the formula for RQ.
- 18) Write the physiological effects of Absciscic acid.
- 19) Draw the floral diagram of Datura metel.

## IV. Answer all the questions:

2×5=10

- 20) a) Draw the flow chart of Citric Acid Cycle.  
b) Explain the botanical description of Allium cepa.
- 21) a) Explain the structure of stomata with labelled diagram.  
b) Differentiate Alburnum and Duramen.

(OR)

(OR)



**PART - II [BIO-ZOOLOGY]****Marks: 35****8×1=8****I. Choose the correct answer and write:**

- 1) Who coined the term biodiversity?  
a) Walter Rosen      b) A.G. Dansley      c) Aristotle      d) E.P.D. Gandol
- 2) Lateral line sensory organs are found in it.  
a) Salamander      b) Frog      c) Water snake      d) Fish

**3) Make the correct pairs:****Row - I****Row - II**

- |           |   |              |
|-----------|---|--------------|
| P) Lipase | - | i) Starch    |
| Q) Pepsin | - | ii) Casein   |
| R) Rennin | - | iii) Protein |
| S) Tyalin | - | iv) Lipid    |
- a) (P-iv) (Q-ii) (R-i) (S-iii)      b) (P-iii) (Q-iv) (R-ii) (S-i)
  - c) (P-iv) (Q-iii) (R-ii) (S-i)      d) (P-iii) (Q-ii) (R-iv) (S-i)
- 4) At the venous end of the capillary bed, the osmotic pressure is  
a) greater than the hydrostatic pressure  
b) results in the net excretion of fluids  
c) results in the net absorption of fluids  
d) no change occurs
  - 5) The hormone that helps in the reabsorption of water in the renal tubules is  
a) cholecystokinin      b) angiotensin II  
c) anti diuretic hormone      d) pancreozymin
  - 6) The pointed portion of the elbow is  
a) acromion process      b) clinoid fossa  
c) olecranon process      d) symphysis
  - 7) When the potential across the axon membrane is more negative than the normal resting potential, what state is the neuron considered to be in?  
a) Depolarization      b) Hyperpolarization  
c) Repolarization      d) Hypopolarization
  - 8) A pregnant woman has given birth to a baby girl. The baby is suffering from short stature, brain development disorder, low cognitive ability, and abnormal skin. The reason for this is  
a) Low growth hormone secretion      b) Thyroid cancer  
c) Pars distalis hypersecretion      d) Iodine deficiency in the diet

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

- 9) The head of a cockroach is hyponathus. Why?
- 10) Name the layers of the digestive tract wall.
- 11) Distinguish the peripheral nephrons from the medullary nephrons.
- 12) How does a person's body adapt to living for a long time at high altitudes?
- 13) The action potential occurs in response to a threshold stimulus but not at sub threshold stimuli. What is the name of the principle involved?
- 14) Name the unique characteristics of a duck.

**III. Answer any three questions:****3×3=9****Answer Question number 19 is compulsory.**

- 15) Write the characteristics that differentiate cartilaginous fish from the living jawless fish.
- 16) Why is blood called a specialized connective tissue?
- 17) Differentiate between arteries and veins.
- 18) What are the symptoms of glomerulo nephritis?
- 19) Humulin - N is administered to diabetic patients through injection. Why?

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

- 20) What are the nutritional values of fish?  
Describe the common hazards faced by scuba divers. (OR)
- 21) Explain the basic properties of Chordates.  
If you watch TV or mobile phone for a long time at night, your health will be affected. Support this statement by answering from the section you are currently studying. (OR)