V11Bio

Virudhunagar District

Common Second Mid Term Test - 2023

Standard 11

BIOLOGY

Time: 1.30 Hrs. Marks: 50

PART - I [BIO-BOTANY] Marks: 25

Section - I

I. Answer all the questions: **5×1=5**

1) Grafting is successful in dicots but not in monocots, because the dicots have
   a) Cambium for secondary growth
   b) Cork cambium
   c) Vascular bundles arranged in a ring
   d) Vessels with elements arranged end to end
2) What is the fate of primary xylem in a dicot stem showing extensive secondary growth?
   a) It gets surrounded by primary phloem.
   b) It gets crushed.
   c) It is retained in the centre of the axis.
   d) May or may not get crushed.
3) Stomata of a plant open due to
   a) Influx of Cl^- b) Influx of OH^- c) Influx of K^+ d) Efflex of K^+
4) _____ is an important element for normal growth and functioning of a plant.
   a) Calcium b) Potassium c) Phosphorus d) Nitrogen
5) **Choose the correct statements:**
   i) Stone cells are found in pulp of pyrus.
   ii) When protoxylem elements encircled by metaxylem elements on both side, is called as centrach xylem.
   iii) Lateral roots originates from Pericycle.
   iv) Meristamatic tissue are indifferentiated cells.
   a) ii, iii b) i, ii, iv c) iii, iv d) i, iii, iv

Section - II

II. Answer any three of the following: **3×2=6**

6) Why the cells of sclerenchyma and tracheids become dead?
7) Define : Imbibition
8) Distinguish between Hard wood and Soft wood.
9) Huge amount of nitrogen is present in the atmosphere, but higher plants fail to utilize it. Why?
10) What is eustele?

Section - III

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

Q.No. 15 is compulsory.

11) State Histogen theory of shoot apical meristem.
12) In which season the vessels of anglosperms are larger in size? Why?
13) What are the parameters which control water potential?
14) Why is that in certain plants deficiency symptoms appear first in young parts of the plants, while in others they do so in mature organs?
15) If the concentration of salt in the soil is too high and the plant may wilt even if the field is thoroughly irrigated. Explain.

Section - IV

Answer the following: **1×5=5**

16) a) Distinguish the anatomy of dicot stem and dicot root.

(OR)

b) Write the role of nitrogenase enzyme in nitrogen fixation.

PART - II [BIO-ZOOLOGY]

Marks: 25

Section - I

Note: i) Answer all the questions. **5×1=5**

ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.

1) Which of the following parings is correct?
   a) motor nerve - afferent b) sensory - afferent
   c) motor nerve - dorsal d) sensory nerve - ventral
2) Which of the following statement concerning the somatic division of the PNS is not correct?
   a) its pathway innervate skeletal muscle
   b) its pathway are usually voluntary
   c) its pathway always involve four neurons
   d) some of its pathway are referred to as reflex arcs
3) Hyper-secretion of Growth Hormone in children leads to
   a) Graves disease b) Cretinism
   c) Tetany d) Gigantism
4) The pointed portion of elbow is
   a) acromion process b) glenoid cavity
   c) olecranan process d) symphysis
5) Which is the jointless bone in our body?
   a) ethmoid b) hyoid c) sphenoid d) patella

Section - II

Note: Answer any three of the following questions. **3×2=6**

6) List any four disorders of muscular system.
7) What are floating ribs?
8) Sam's optometrist tells him that his intracular pressure is high. What is this condition called and which fluid does it involve?
9) Name the gland and hormone maintains sleep wake cycle of our body.
10) Why old age people are sick often?

Section - III

Note: Answer any three of the following questions. **3×3=9**

Q.No. 15 is compulsory.

11) Explain the type of contraction takes place while you hold a heavy bag.
12) Which is called emotional brain? Why?
13) What is homeostasis?
14) Differentiate hyperglycemia from hypoglycemia.
15) Draw a neat labelled sketch of neuron.

Section - IV

Note: Answer the following question. **1×5=5**

16) Write the functions of skeletal system.

(OR)

Briefly explain the structure of thyroid gland.
