

Model Question Paper
Botany-Plant Anatomy-Part IV
12th Standard

Biology

Reg.No. :

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I. Answer all the questions.

II. Use blue pen only.

Time : 01:00:00 Hrs

Total Marks : 85

5 x 1 = 5

Part-A

- 1) When the tangential walls are thickened and the radial walls are devoid of thickening that type of collenchyma is
(a) lamellar collenchyma (b) angular collenchyma (c) lacunate collenchyma (d) storage collenchyma
- 2) Osteosclerids are found in the
(a) seed coat of pisum (b) seed coat of Crotalaria (c) pulp of pyrus (d) hypodermis of Nicotiana
- 3) The tissues developed by procambium are
(a) primary xylem and secondary xylem (b) primary phloem and secondary phloem (c) primary xylem and primary phloem (d) secondary xylem and secondary phloem
- 4) The important feature of sieve element is
(a) presence of nucleus and lining layer of cytoplasm (b) presence of thick secondary wall (c) presence of pits in their lateral wall
(d) nucleus is absent and it contains a lining layer of cytoplasm
- 5) When protoxylem vessels occurs towards the centre and metaxylem towards the periphery it is known as
(a) collateral (b) polyarch (c) endarch (d) exarch

Part-B

5 x 3 = 15

- 6) What is a respiratory cavity or sub-stomatal cavity?
- 7) What is a bundle sheath or border parenchyma in a leaf?
- 8) What are the functions of veins in a leaf?
- 9) What is a bicollateral vascular bundle ?
- 10) What are called passage cells?

Part-C

5 x 5 = 25

- 11) Draw and label the parts of T.S of monocot leaf (grass leaf).
- 12) Write a note about Lenticles.
- 13) Write a note about Annual rings.
- 14) Write a note about Tyloses.
- 15) Write the difference between sap wood and heart wood. (or) Write short notes on sap wood and heart wood.

Part-D

4 x 10 = 40

- 16) Describe the primary structure of a dicot root.
- 17) Describe the primary structure of a monocot root.
- 18) Write anatomical differences between dicot stem and monocot stem.
- 19) Describe the primary structure of a monocot stem.
