

2019

B.Sc.

3rd Semester Examination

BOTANY (Honours)

Paper - C 5-T

Anatomy of Angiosperms

Full Marks : 40

Time : 2 Hours

The question are of equal value for any group/half. The figures in the margin indicate full Marks. Candidates are required to give their answers in their own words as far as practicable. Illustrate the answers wherever necessary.

1. Answer any five of the following:

$2 \times 5 = 10$

- a) Define annual ring.
- b) What is called dermatocalyptogen?
- c) Compare between lysigenous duct and schizogenous duct.
- d) Define casparian strips & quiescent centre.
- e) What is bicollateral vascular bundle? Cite example.
- f) Compare between anticlinal and periclinal division.

[Turn Over]

(2)

g) Mention the distribution and function of complementary cell.

h) Distinguish laticifer duct from laticifer cell.

2. Answer any four of the following: $5 \times 4 = 20$

a) Classify stomata with examples and diagrams. $3 + 2$

b) What is called extrastelar secondary growth? Discuss it with its different components and diagrams.

$2 + 3$

c) Discuss the secondary growth processes in monocot root. 5

d) Diagrammatically represent the root -stem transition with one example. 5

e) Write the anatomical features of the root of apical meristem. 5

f) Distinguish between root-apex and shoot-apex.

$2\frac{1}{2} + 2\frac{1}{2}$

3. Answer any one of the following : $10 \times 1 = 10$

a) Discuss different types of parenchyma cells with examples. Define tylosoid. Compare libriform fibre with fibre tracheids. $5 + 2 + 3$

b) Trace the cytodifferentiation in trachery elements. Distinguish between ray initial and fusiform initial.