

2022

3rd Semester Examination

BOTANY (Honours)

Paper : C 5-T

(Anatomy of Angiosperms)

[CBCS]

Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

A. Answer any *five* of the following questions : 2×5=10

- (a) What is dendrogram?
- (b) What is annual ring?
- (c) What is vested pith?
- (d) Compare between anticlinal and periclinal cell division.
- (e) What is Kranz anatomy? Name any two families where it is found.
- (f) Compare between ring porous wood and diffuse porous wood.
- (g) What is dermatocalyptogen?
- (h) What is quiescent centre?

P.T.O.

B. Answer any *four* of the following questions :  $5 \times 4 = 20$

- (a) Briefly describe the root-stem transition with suitable diagram.
- (b) Write the anatomical adaptation of hydrophytes.
- (c) What is periderm? Describe periderm formation in plants.
- (d) Describe different theories regarding shoot apex organization of plants.
- (e) Classify different types of trichomes with suitable examples.
- (f) Discuss the origin of lateral root.

C. Answer any *one* of the following question :  $10 \times 1 = 10$

- (a) Briefly describe the intra-stelar secondary growth of dicot stem with proper diagram. Write the anomalous secondary growth of *Bignonia* with diagram.  $5+1+3+1=10$

(b) Write short notes of the following (any *four*) :  $2.5 \times 4 = 10$

- (i) Reaction Wood.
  - (ii) Hydathodes.
  - (iii) Dendrochronology.
  - (iv) Leaf gap and leaf trace.
  - (v) Forensic medicine.
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