

B.Sc. 2nd Semester (Honours) Examination, 2023 (CBCS)**Subject : Botany****Course : CC-IV****(Morphology and Anatomy of Angiosperms)****Time: 2 Hours****Full Marks: 40***The figures in the margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer *any five* questions from the following: 2×5=10
- What are 'crassulae'? Where are they found?
 - What is the difference between lithocyst and cystolith?
 - What is a bicollateral vascular bundle? Where is it found?
 - What is cremocarp and where do you find gynobasic style?
 - Difference between anisocytic and diacytic stomata.
 - What are ergastic substances? Give an example. 1+1
 - Draw and define imbricate aestivation of a flower.
 - Draw a labelled diagram of a typical embryo sac.
2. Answer *any two* of the following questions: 5×2=10
- Define placentation and describe any four types of placentation with suitable diagrams.
 - Write a note on the structure of plasmodesmata. State its important functions. 3+2
 - Draw and describe Hypanthodium and Cyathium inflorescence with example. 2½+2½
 - State the Korper-Kappa theory of root apical organisation with illustrations.
3. Answer *any two* of the following questions: 10×2=20
- Describe adhesion and cohesion of stamens with example. 5+5
 - Describe in brief the chemical constituents of the cell wall. Write a detailed note on the ultra-structure of the cell wall. 4+6
 - Write a note on the 'extrastelar' secondary growth. Why secondary growth in *Dracaena* is anomalous? 4+6
 - Write short notes on: 2½×4=10
 - Lenticel
 - Tyloses
 - Phyllotaxy
 - Dendrochronology