



K22U 3611

Reg. No. : .....

Name : .....

Third Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/  
Improvement) Examination, November 2022  
(2019 Admission Onwards)

COMPLEMENTARY ELECTIVE COURSE IN BOTANY FOR B.SC.  
ZOOLOGY AND FORESTRY CORE  
3C03BOT : Angiosperm Morphology, Anatomy and Systematics

Time : 3 Hours

Max. Marks : 40

*Instruction : Draw diagrams wherever specified.*

PART- A

(Objective type questions)

Answer all :

(4×1=4)

- Paripinnately compound leaves are present in
  - Cassia
  - Rose
  - Hibiscus
  - None
- Bicollateral vascular bundles are seen in
  - Sunflower
  - Cucurbitta
  - Cassia
  - Rose
- Binomial system of nomenclature was proposed by
  - Hooker
  - Roxburgh
  - Linnaeus
  - None
- Interpetiolar stipules are present in
  - Rubiaceae
  - Malvaceae
  - Solanaceae
  - Poaceae

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PART- B

(Short essay questions)

Answer any eight.

(8×2=16)

- Write a brief account on phyllotaxy.
- What are meristems ? Mention their features.
- Distinguish between heartwood and sapwood.
- Describe the inflorescence in Euphorbia.
- Write the economic importance of Solanaceae.
- Comment on aggregate fruits.
- What is aestivation ? Mention its types.
- Describe Histogen theory.
- What is a complex tissue? Mention its types.
- Explain labellum. Give example.
- Mention the salient features of Annonaceae.
- Give an account on ergastic substances.

PART - C

(Essay questions)

Answer any four.

(4×3=12)

- Write a brief account on Cymose inflorescence.
- Give an account on different types of vascular bundles.



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- Compare the anatomical features of dicot and monocot leaves.
- What are botanical gardens ? Mention their role.
- List out a few important Indian herbaria.
- Give the salient features of Malvaceae.

PART - D

(Long essay questions)

Answer any one.

(1×8=8)

- Describe the stelar and extrastelar secondary thickening in dicot stem. Draw labelled diagrams.
- Give an account on the vegetative and floral characters of Asteraceae. Add a note on its salient features and economic importance.
- Describe the anomalous secondary thickening in Boerhaavia.