



K16P 0999

Reg. No. :

Name :

**Third Semester M.A./M.Sc./M.Com. Degree (Reg./Supple./Imp.)
Examination, November 2016**

BOTANY

(2014 Admission Onwards)

BOT 3C09 : Plant Systematics and Morphology

Time : 3 Hours

Max. Marks : 60

Instruction : Draw diagrams wherever necessary.

SECTION – A

Answer both questions. (Either a or b)

1. a) Give an account of Bentham and Hooker's system of classification and compare it with the APG system.

OR

- b) Write on the concepts of the origin of Angiosperms with reference to their ancestral stock and time of origin.

2. a) Explain how cytological data helps in solving taxonomic problems.

OR

- b) Write on the origin and evolution of carpels. (2×8=16)

**SECTION – B
(Answer any two)**

1 mark for part a, 2 marks for part b and 3 marks for part – c.

3. a) What is binomial nomenclature ?
b) What is rule of priority ?
c) Explain effective and valid publication.

4. a) Define species.
b) Give the taxonomic hierarchies used in taxonomy.
c) Explain polyphyletic relationship.

P.T.O.



5. a) What is nomina conservanda ?
b) Write on any four plants of economic importance of Clusiaceae.
c) Give the diagnostic characters of Clusiaceae. (2×6=12)

SECTION – C
(Answer any six)

6. Write on the concept of primitive angiosperm.
7. Importance of herbaria in taxonomic research.
8. Choice and retention of names.
9. Characters used from pollen as taxonomic evidence.
10. Describe the characters of Menispermaceae.
11. Describe the inflorescence of Aroidae.
12. Write on the variations in Androecium across families.
13. Write on evolutionary tendencies in flower. (6×3=18)

SECTION – D
(Answer any seven)

14. What is a fossil ?
15. What is natural system of classification ?
16. What is a cladogram ?
17. What is a threatened taxa ?
18. What are the diagnostic features of Balsaminae ?
19. Write on the androecium in Lauraceae.
20. Write on the morphology of nectaries.
21. What is a corona ?
22. What is the basis for numerical taxonomy ?
23. Write on the special characters of Loranthaceae. (7×2=14)