

K19P 1073

Name:.....

III Semester M.Sc. Degree (CBSS - Reg./Suppl./Imp.) Examination, October - 2019

Botany

(2014 Admission Onwards)

BOT 3 C 09 : PLANT SYSTEMATICS AND MORPHOLOGY

Time: 3 Hours

Max. Marks: 60

Instructions to candidate: Draw diagrams wherever needed.

SECTION - A

Answer both questions (Either a or b)

 $(2 \times 8 = 16)$

 Give a comparitive account of Bentham and Hooker's system of classification and the latest APG system.

(OR)

Write on the concept of primitive angiosperm. Add a note on the ancestral stock and time of origin of angiosperms.

Explain with examples how anatomical evidence helps in solving taxonomic problems.

(OR)

Write on the methods used in numerical taxonomy.

SECTION - B

 $(2 \times 6 = 12)$

(Answer any two)1Mark for Part - a, 2 Marks for Part-b, 3 Marks for Part- c.

- 3. a) What is faxonomic heirarchy.
 - b) Write on the concept of species and infraspecific categories.
 - c) Differentiate divergence and convergence.
- 4. a) What is a carpel.
 - b) What are the different types of carpels.
 - c) Explain the concept of foliar origin of carpel.



- 5. a) What is the systematic position of Passifloraceae.
 - b) Give any two plants of economic importance.
 - c) Give the diagnostic characters of the family.

SECTION - C

 $(6 \times 3 = 18)$

(Answer any six)

- 6. Polyphyletic origin.
- 7. Major Botanic gardens.
- 8. Herbarium ethics.
- 9. Herbarium labels.
- 10. Nectaries.
- 11. Androecium.
- 12. Placentation types.

SECTION - D (Answer any Seven)

 $(7 \times 2 = 14)$

- 13. Fossel.
- 14. Homology
- 15. Flora
- 16. Holotype
- 17. Names of hybrids
- 18. Karyotype
- 19. Pollinia
- 20. Co evolution of flower
- **21.** Spur
- 22. Stamens in Lauraceae