Third Year B.Sc., Degree Examination August/September 2010

DIRECTORATE OF CORRESPONDENCE COURSE

BOTANY (Freshers)

Paper - III: MORPHOLOGY, TAXONOMY OF ARGIOSPERMS, ECONOMIC BOTANY AND CYTOGENETICS

Time: 3 hrs]

[Max.Marks: 85

Note:

- 1. Answer all questions.
- 2. Draw diagrams wherever necessary.
- I. Simple answer question. Answer in a word, Phrase or sentence:

10 X 1 = 10 Marks

- 1. What is Inversion?
- 2. What are alleles.
- 3. Give an example for runner.
- 4. Name the fruit of compositae.
- 5. Define epigynous flower.
- 6. Which cell organelle is called suicidal bag?
- 7. In which family do you find synandrous condition?
- 8. Mention the ratio of Dihybrid test cross.
- 9. What is Phyllode?
- 10. Define Kinetochore.

II. Short answer question. Answer any FIVE of the following:

5 X 3 = 15 Marks

- 11. Define aestivation and mention two types with examples.
- 12. Write a note on epigeal seed germination.
- 13. Describe aerial root modification.
- **14.** Describe monohybrid cross.
- 15. Write a note on pulses yielding plants.

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- 16. What are aggregate fruits? Mention two types with examples.
- 17. Describe fluid mosaic model of plasma membrane.

III. Medium answer question. Answer any FIVE of the following:

5 X 6 = 30 Marks

- 18. Write a note on fibre yielding plants.
- 19. What is Epistasis? Explain the phenomenon with an example.
- 20. Describe ultrastructure of chromosome with diagram.
- **21.** Enumerate the salient features of Euphorbiaceae and write botanical names of two plants.
- 22. Describe insectivorus plants with suitable examples.
- 23. Assign the following plants to their respective families and give their Botanical names and uses.
 - a) Ajwan
- b) Yellow teak
- c) Crabseye

- d) Cardamom
- e) Ladies finger
- f) serpagandh

IV. Long Answer questions. Answer any THREE of the following.

 $3 \times 10 = 30 \text{ Marks}$

- 24. Give an account of cymose and racemose inflorescences.
- 25. Describe the structure and functions of Golgi complex.
- 26. Describe the salient features of Myrtaceae and solanaceae and mention scientific names of two plants.
- **27.** Answer the following: (a) Euploidy.
 - (b) Types of compound leaves.

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