

Third Year B.Sc., Degree Examination
August / September 2009
Directorate of Correspondence Course
Botany

**Paper - III : Morphology, Taxonomy of Angiosperms,
Economic Botany and Cytogenetics**

Time : 3 Hours

Max. Marks : 75

- Note :** 1. Answer all required number of questions
2. Draw diagrams wherever necessary

I. Simple answer questions :

Answer in a word, or a phrase or a sentence.

10x1=10

1. What is aestivation?
2. Define phenotype.
3. Give an example for bulb.
4. Name the fruit of Poaceae
5. What is thylakoid?
6. In which family corolla is cruciform?
7. What is epistasis ?
8. What is deletion?
9. What is staminode?
10. Who is the father of Binomial nomenclature?

II. Short answer questions.

Answer any FIVE of the following.

5x3=15

11. Describe the tap root modifications for storage.
12. Explain the structure of mitochondrion.
13. Describe incomplete dominance with an example.
14. Write a note on cohesion of stamens.
15. Explain the reproductive whorls of Annonaceae.
16. Write a note on Narcotic plants.
17. Explain Papilionaceous corolla.

III. Medium answer questions.**5x6=30****Answer any FIVE of the following**

18. Enumerate the salient features of Malvaceae and write botanical names of two examples.
19. Give an account of structure and functions of Golgi complex.
20. Give an account of Cereals and Millets.
21. Describe different types of gamopetalous corolla.
22. Explain the supplementary factor hypothesis.
23. Assign the following to their respective families and give their Botanical names.
 - a) Sarpagandha
 - b) Cardamom
 - c) Teak
 - d) Groundnut
 - e) Cashew nut
 - f) Water- melon

IV. Long answer questions.**Answer any TWO of the following :****2x10=20**

24. Give an account of Racemose types of Inflorescence.
25. Describe the salient features of Asclepiadaceae and Euphorbiaceae. Give scientific names of two plants to each family.
26. With a suitable example explain the Dihybrid cross of Mendel.
27. Answer the following
 - a) Aneuploidy
 - b) Structure of monocot seed

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