

DSC – 290 (BOT-UG)

Final Year B.Sc. Degree Examination, November 2008  
Directorate of Distance Education Course  
BOTANY

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

Time : 3 Hours

Max. Marks : 75

- Notes : 1) All questions are compulsory.  
2) Draw diagrams wherever necessary.

I. Simple questions :

Answer in a word, phrase or sentence :

(10×1=10)

- 1) What is phyllotaxy ?
- 2) What is heridity ?
- 3) Name the fruit of Apiaceae
- 4) Which cell organelle is called suicide bags ?
- 5) Give an example for fusiform root
- 6) What is Epigeal germination ?
- 7) Write the phenotypic ratio of dihybrid cross.
- 8) Write the botanical name of Ashok tree
- 9) Who discovered nucleus ?
- 10) What is vasculum ?

II. Short answer questions :

Answer any FIVE of the following :

(5×3=15)

- 11) Draw a neat labelled diagram of Ultra structure of chloroplast.
- 12) Explain the capitulum inflorescence.
- 13) What is placentation ? Mention any four types.
- 14) Explain the nucleosome model of chromosoma.

P.T.O.



- 15) Write a note on Binomial nomenclature.
- 16) Explain the leaves of Liliaceae.
- 17) Write three functions of the nucleus.

III. Medium answer questions :

Answer any FIVE of the following :

(5×6=30)

- 18) Describe the underground modifications of stem for storage.
- 19) Explain the salient features of Brassicaceae. Give two examples.
- 20) Give an account of cohesion of stamens.
- 21) With a suitable example describe the monohybrid cross of Mendel.
- 22) Explain the different types of chromosomes based on the position of the centromere.
- 23) Give an account of timber yielding plants.

IV. Long answer questions :

Answer any TWO of the following :

(10×2=20)

- 24) Describe the characters of Ascomycetes. Give scientific names of two examples.
- 25) Explain the complementary factor hypothesis.
- 26) Write short notes on :
  - a) Simple dry dehiscent fruits
  - b) Endoplasmic Reticulum
- 27) Assign the following plants to their respective families. Write their botanical names and economic importance.
  - a) Clove
  - b) Cinchona
  - c) Rosewood
  - d) Paddy
  - e) Castor.

