



II Year B.Sc. Degree Examination, Sept./Oct. 2012

Directorate of Distance Education

BOTANY

Paper – II : Gymnosperms, Paleobotany, Anatomy, Embryology and Ecology

Time : 3 Hours

Max. Marks : 75/85

- Instructions :**
- 1) *Students who have attended 25 Marks IA Scheme will have to answer for total of 75 Marks.*
 - 2) *Students who have attended 15 Marks IA Scheme will have to answer for total of 85 Marks.*
 - 3) **One** mark questions should be answered in **first two** pages of the answer book.
 - 4) **Draw** neat labelled diagrams **wherever** necessary.
 - 5) Question no. **V** is **compulsory** for **85** marks scheme **only**.

I. Simple answer questions :

(10×1=10)

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

- 1) What is microsporogenesis ?
- 2) Define fossil.
- 3) Give an example for monosporic embryo sac.
- 4) Define polyembryony.
- 5) In which plant do you find pavement tissue ?
- 6) Name the type of vascular bundle in *Cucurbita* stem.
- 7) What are halophytes ?
- 8) Who proposed histogen theory ?
- 9) What is a sere ?
- 10) Define deforestation.



II. Short answer questions :

(5×3=15)Answer **any FIVE** of the following :

- 11) Write a note on annual rings.
- 12) Mention the types of collenchyma.
- 13) List out the functions of parenchyma.
- 14) Draw the labelled diagram of Isobilateral leaf.
- 15) Draw the labelled diagram of cell wall.
- 16) Write the advantages of cross pollination ?
- 17) Mention the types of endosperm.

III. Medium answer questions :

(5×6=30)Answer **any FIVE** of the following :

- 18) Write about the components of xylem.
- 19) Write about the adaptations of epiphytes.
- 20) Explain L.S. of *Cycas* ovule.
- 21) Write a note on :
 - a) ruminant endosperm
 - b) vermiform appendage.
- 22) Write a note on stinging hairs and glandular hairs.
- 23) Explain double fertilization and triple fusion.



IV. Long answer questions :

(2×10=20)

Answer **any TWO** of the following :

24) Describe the anatomy of needle of *Pinus*.

25) Write a note on vegetation of Karnataka.

26) Explain the biotic factors that effects plant growth.

27) Explain the anomalous secondary growth in *Dracaena*.

V. (**Compulsory** question for **85** marks scheme **only**)

Answer **any ONE** of the following :

(1×10=10)

28) Explain ground tissue system.

29) Write a note on *Lepidodendron*.
