

FACULTY OF SCIENCE
B.Sc. (CBCS) I Year (Practical) Examination
Subject: BOTANY
Semester-II

Paper-II (Gymnosperms, Taxonomy of Angiosperms and Ecology)
QUESTION BANK

Time: 3 Hours}

{Max. Marks: 50

Note: Answer All questions. Draw well labeled diagrams wherever necessary.

- I. Prepare T.S. of the given material 'A' as a Double stain, temporary mount and identify with diagnostic features and provide suitable diagrams.
(Slide Preparation – 4; Classification – 1; Diagram – 2; Description – 3) (10M)
1. *Pinus* needle
 2. *Gnetum* stem
 3. *Gnetum* leaf
- II. Assign the specimen 'B' to the respective family, giving reasons, describe and classify. (Description: 5, Diagram: 3, Floral formula:1, classification:1) (10M)
1. Annonaceae 2. Capparidaceae 3. Rutaceae
 4. Faboideae/Papilionoideae 5. Caesalpinoideae 5. Mimosoideae
 6. Cucurbitaceae 7. Apiaceae 8. Asteraceae 9. Asclpiadaceae
 10. Lamiaceae 11. Amaranthaceae 12. Euphorbiaceae
 13. Orchidaceae 14. Poaceae 15. Zingberaceae
- III. Prepare a mount of given material 'C'.
- (Slide Preparation – 4; Diagram – 2; Description – 2) (8M)
1. Hydrophyte: a. *Eichhornia*, b. *Hydrilla*, c. *Pistia*, d. *Nymphaea*
 2. Xerophyte: a. *Asparagus* b. *Opuntia* c. *Euphorbia melii*
- IV. Identify the given specimens 'D & E' : (Gymnosperm– 1; Ecology: 1) 4X2=8M
1. *Pinus* male cone 2. *Pinus* female cone 3. *Gnetum* twig 4. *Gnetum* male cone
 4. *Gnetum* female cone 6. *Eichhornia* 7. *Hydrilla* 8. *Pistia* 9. *Nymphaea*
 10. *Asparagus* 11. *Opuntia* 12. *Euphorbia melii*
- V. Identify the given slides 'F & G' (Gymnosperm – 1; Ecology: 1) 4X2=8M
1. *Pinus* male cone V.S. 2. *Pinus* pollen grains 3. *Pinus* female cone V.S.
 4. *Pinus* ovule V.S. 5. *Gnetum* male cone V.S. 6. *Gnetum* female cone V.S.
 7. *Gnetum* ovule V.S. 8. *Hydrilla* stem T.S. 9. *Nymphaea* petiole T.S.
 10. *Asparagus cladode* T.S.
- VI. Herbarium 3M
- VII. Record 3M