

Mid-West University
Examinations Management Office

Birendranagar, Surkhet

End Semester (Alternative/Physical) Examinations -2078

Bachelor level/ B.Sc / 2nd Semester

Full Marks : 60

Time: 3hrs

Pass Marks : 30

Subject :Phanerogams (Gymnosperms and Angiosperms) (BOT321)

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Answer the following questions

[6x10=60]

1. a) Discuss economic importance of gymnosperms with its features and disturbances.
b) Discuss economic importance and floral diagram of family cucurbitaceae. Draw the floral diagram and formula of magnoliaceae family.
2. a) Give general account of reproduction of *Ephedra*. Write the phylogenetic relation of family Asteraceae.
b) What are the differences between normal and coralloid root of *Cycas* and write the morphological features of *Gnetum*.
3. Discuss morphology and anatomy of leaf of *Cycas*.

OR

Describe T.S. of stem of *Pinus* with neat and clean diagram.

4. a) Discuss inflorescence of family gramineae and write short note on APG system of classification.
b) Write merits and demerits of Bentham and Hooker's system of classification

5. Describe the family orchidaceae in semi-technical terms with floral formula, floral diagram and economic importance with its phylogenetic relationship.

OR

Describe family lamiaceae in semi-technical terms with floral formula, floral diagram and economic importance with its phylogeny.

6. Elaborate Cronquist (modern) system of classification and write the economic importance of any five plants belongs to family Rosaceae.

THE END