

B.Sc. (Part—I) Semester—II Examination

BOTANY

(Gymnosperm, Morphology of Angiosperms and Utilization of Plants)

Time : Three Hours]

[Maximum Marks : 80

- Note** :— (1) There are **SEVEN** questions in all.
 (2) Question No. 1 is compulsory and carries **8** marks.
 (3) Question numbers 2 to 7 carry equal marks.
 (4) Draw neat and well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :—

- (i) Papilionaceous type of corolla is present in the family _____ . $\frac{1}{2}$
 (ii) *Gnetum* belongs to order _____ . $\frac{1}{2}$
 (iii) Monocotyledons leaves are having _____ type of venation. $\frac{1}{2}$
 (iv) Pollination through water is known as _____ . $\frac{1}{2}$

(B) Choose the correct alternatives —

- (v) The Botanical name of Neem is _____ : $\frac{1}{2}$
 (a) *Catharanthus roseus*
 (b) *Ocimum Sanctum*
 (c) *Azadirochta indica*
 (d) *Aloe vera*.
- (vi) Conical root is modification for : $\frac{1}{2}$
 (a) Food storage
 (b) Support
 (c) Respiration
 (d) Vegetative reproduction.
- (vii) Verticillaster inflorescence is present in the family : $\frac{1}{2}$
 (a) Verbenaceae
 (b) Apocynaceae
 (c) Lamiaceae
 (d) Asclepiadaceae.

- (viii) Kurfi Chandramukhi is a variety of : ½
- (a) Potato
 - (b) Wheat
 - (c) Groundnut
 - (d) Cotton
- (C) Answer in one sentence :
- (ix) Define Placentation. 1
 - (x) What is gamopetalous corolla ? 1
 - (xi) Define annual plants. 1
 - (xii) What is Botanical name of Black Pepper ? 1
2. Write short notes on :—
- (a) Compression. 4
 - (b) Geological Time Scale (Tabular). 4
 - (c) T.S. Stem of *Lyginopteris*. 4
- OR**
- (d) Female Reproductive structure of *Bennettites*. 4
 - (e) Male reproductive structure of *Lyginopteris*. 4
 - (f) Petrification. 4
3. Describe the structure of female cone and L.S. of ovule in *Pinus*. 12
- OR**
- Explain :
- (g) Economic importance of Gymnosperms. 6
 - (h) T.S. stem of *Gnetum* showing primary structure. 6
4. Comment on :—
- (i) Phylloclade. 4
 - (j) Stilt Root. 4
 - (k) Whorled Phyllotaxy. 4
- OR**
- (l) Bulb. 4
 - (m) Pneumatophore. 4
 - (n) Reticulate Venation. 4

5. Explain the following :—
- (o) Marginal Placentation. 4
 - (p) Cruciform corolla. 4
 - (q) Capitulum inflorescence. 4

OR

- (r) Cohesion of Stamens. 4
 - (s) Anemophily. 4
 - (t) Raceme inflorescence. 4
6. Write detailed account on morphology, varieties and economic importance of cotton. 12

OR

Explain :

- (u) Varieties and Economic Importance of Groundnut. 6
 - (v) Sorosis and Syconus. 6
7. Explain :—
- (a) Economic importance of clove. 4
 - (b) Medicinal uses of *Aloe Vera*. 4
 - (c) Sources of Timber. 4

OR

- (d) Medicinal uses of *Emblica Officinalis*. 4
- (e) Economic importance of Cinnamon. 4
- (f) Economic Importance of Eucalyptus. 4

