

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

BOTANY

(Gymnosperm, Morphology of Angiosperm and Utilization of Plants)

Time : Three Hours]

[Maximum Marks : 80

N.B. :- (1) There are seven questions in all.

(2) Question No. 1 is compulsory and carry 8 marks.

(3) Question numbers 2 to 7 carry equal marks.

(4) Draw neat and well labelled diagrams wherever necessary.

I. (A) Fill in the blanks :

(i) Phyllode is modification of _____ . $\frac{1}{2}$ (ii) The fruit is a fertilized and ripened _____ . $\frac{1}{2}$ (iii) Pollination through Animal is known as _____ . $\frac{1}{2}$ (iv) Modification of root in radish is _____ . $\frac{1}{2}$

(B) Choose the correct alternatives :

(v) Cyathium inflorescence found in family : $\frac{1}{2}$

(a) Euphorbiaceae

(b) Papilionaceae

(c) Solanaceae

(d) Verbenaceae

(vi) Botanical name of Potato is : $\frac{1}{2}$

(a) Solanum tuberosum

(b) Solanum indicum

(c) Solanum nigrum

(d) Solanum xanthocarpum.

(vii) Flower is a condensed and modified : $\frac{1}{2}$

(a) Shoot

(b) Stem

(c) Leaf

(d) Inflorescence.

- (viii) Conical root is modified for : ½
- (a) Food storage
 - (b) Support
 - (c) Respiration
 - (d) Vegetative reproduction.
- (C) Answer in one sentence :
- (ix) What are Fossils ? 1
 - (x) What is Phyllotaxy ? 1
 - (xi) What is Pollination ? 1
 - (xii) What is Botanical name of Neem. 1
2. Write short notes on :
- (a) Anatomy of stem in *Lyginopteris oldhamia*. 6
 - (b) Structure of male flower in *Bennethtes*. 6
- OR**
- Describe the process of plant fossilization and types of Fossils. 12
3. Explain :
- (c) Affinities of Gymnosperm with Angiosperm. 4
 - (d) L.S. of Ovule in Gnetum. 4
 - (e) T.S. of pinus needle (only diagram). 4
- OR**
- (f) Economic importance of Gymnosperm. 4
 - (g) T.S. of Gnetum Leaf 4
 - (h) L.S. Ovule in Pinus (only diagram). 4
4. Comment on :
- (i) Opposite phyllotaxy. 4
 - (j) Rhizome 4
 - (k) Pneumatophores. 4
- OR**
- (l) Biennial 4
 - (m) Conical root 4
 - (n) Bulb. 4
5. Comment on :
- (o) Axile placentation 4
 - (p) Raceme 4
 - (q) Anemophily 4

OR

- (r) Marginal placentation. 4
- (s) Papilionaceous corolla. 4
- (t) Self pollination. 4
6. Explain :
- (u) Varieties and Economic importance of Wheat 6
- (v) Syconus and Sorosis. 6
- OR**
- (w) Varieties and Economic importances of cotton. 6
- (x) Drupe and Berry. 6
7. Explain :
- (y) Economic Importance of Eucalyptus. 4
- (z) Medicinal uses of *Azadirachta india*. 4
- (a) Economic importance of Clove. 4
- OR**
- (b) Economic Importance of Black pepper. 4
- (c) Medicinal uses of *Ocimum sanctum* 4
- (d) Medicinal uses of *Asparagus racemosus*. 4

