

AP-427

- (p) Phylloclade 4
 (q) Unipinnate compound leaf 4
 (r) Napiform root. 4
5. Explain :
 (a) Capitulum and Cyathium inflorescence 6
 (b) Cross pollination. 6

OR

What is placentation ? Explain different types of placentation with suitable examples. 12

6. Explain :
 (a) Capsule 4
 (b) Varieties of potato 4
 (c) Economic importance of cotton. 4

OR

- (p) Drupe 4
 (q) Economic importance of wheat 4
 (r) Morphology of ground nut plant. 4
7. Comment on :
 (a) Economic importance of Black pepper 4
 (b) Sources of timber 4
 (c) Medicinal uses of *Ocimum sanctum*. 4

OR

- (p) Economic importance of Cardamom 4
 (q) Economic importance of *Eucalyptus* 4
 (r) Medicinal uses of *Aloe Vera*. 4

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

BOTANY

(Gymnosperms, 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 Nos. 2-7 carry equal marks.

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

1. (A) Fill in the blanks :

(i) The study which deals with plant fossils is known as _____. $\frac{1}{2}$ (ii) Naked seed bearing plants belongs to group _____. $\frac{1}{2}$ (iii) The function of pneumatophore is _____. $\frac{1}{2}$ (iv) The female reproductive whorl in flower is called as _____. $\frac{1}{2}$

(B) Choose the correct alternatives (MCQ) :

(v) The flowers bearing axis in inflorescence is known as :

- (a) Rachis
(b) Petiole
(c) Peduncle
(d) Pedicel $\frac{1}{2}$

(vi) The plants which complete their life cycle in more than two years is :

- (a) Annual
(b) Perennials
(c) Biennials
(d) Seasonals $\frac{1}{2}$

(vii) The pollen grains have wings in :

- (a) *Pinus*
(b) Cotton
(c) *Gnetum*
(d) Wheat $\frac{1}{2}$

(viii) The Botanical name of neem is :

- (a) *Aloe Vera*
(b) *Ocimum sanctum*
(c) *Catharanthus roseus*
(d) *Azadirachta indica* $\frac{1}{2}$

(C) Write answer in **ONE** sentence each :

- (ix) What is Pollination ? 1
(x) Define phyllotaxy. 1
(xi) What is timber ? 1
(xii) Define polypetalous corolla. 1

2. Comment on :

- (a) Petrification 4
(b) Anatomy of *Lyginopteris oldhamia* 4
(c) Geological Time scale (only Table). 4

OR

- (p) Process of plant fossilization 4
(q) Impression 4
(r) Ovuliferous receptacle in Bennettites. 4

3. (a) Explain internal structure of *Pinus* needle. 6
(b) Affinities of Gymnosperms with Angiosperms. 6

OR

- (p) Explain structure of ovule in *Gnetum*. 6
(q) Describe economic importance of Gymnosperms. 6

4. Explain :

- (a) Pneumatophores 4
(b) Rhizome 4
(c) Foliaceous type of stipules 4

OR