

(i) Printed Pages : 4]

Roll No.

(ii) Questions : 9]

Sub. Code :

0	2	5	3
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Exam. Code :

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**B.A./B.Sc. (General) 3rd Semester
Examination**

1127

BOTANY

**(Diversity of Seed Plants and their
Systematic-I)**

Paper : A

Time : 3 Hours]

[Max. Marks : 36

Note :- (i) Attempt *five* questions in all, selecting *one* question from each Unit.

(ii) Question No. 1 is compulsory.

(iii) Draw diagram where necessary.

1. (A) Multiple choice questions. Pick up correct choice.

(i) Stem and seeds of which plant yield a starch called 'Sago' ?

(a) Cycas

- (b) Pinus
- (c) Ephedra
- (d) Gnetum

(ii) Crossotheca is which organ that is imperfectly known part of Lyginopteris ?

- (a) leaf
- (b) stem
- (c) seed bearing
- (d) pollen bearing

(iii) Cycas ovule is :

- (a) anatropous
- (b) orthotropous
- (c) hemitropous
- (d) circinotropous

(iv) Winged pollen grains are present in :

- (a) Gnetum
- (b) Pinus
- (c) Cycas
- (d) Ephedra

(v) Which species of Ephedra is most common in dry areas of Punjab ?

- (a) Triandra
- (b) Foliata
- (c) Major
- (d) Saxatilis

(vi) Religious gymnosperm grown in temples of China and Japan and worshipped is :

- (a) Gnetum
- (b) Cycas
- (c) Ginkgo
- (d) Pinus

6×1=6

(B) Fill in the blanks :

- (i) World's tallest gymnosperms is
- (ii) has mycorrhizal roots.
- (iii) Pollen bearing organs of Lyginopteris was given the name
- (iv) The egg of cycas is
- (v) Common name of pinus gerardiana is
- (vi) Long micropylar tube is present in the ovule of

6×1=6

Unit-I

2. Differentiate between manoxylic and pycnoxylic wood. 6
3. Give general characters of gymnosperms. 6

Unit-II

4. Write note on fossil gymnosperm-Williamsonia. 6
5. Describe methods for the formation of fossils. 6

Unit-III

6. Draw T. S. Young stem of cycas and label it. 6
7. Describe the development of female gametophyte in cycas. 6

Unit-IV

8. Draw a well labelled diagram of T. S. Pinus needle. 6
9. Describe male strobilus of Ephedra. 6