

PE-267-CV-19
M.Sc. BOTANY (2nd Semester)
Examination, June 2022
BIOLOGY & DIVERSITY OF GYMNOSPERM

Time : Three Hours]

[Maximum Marks : 80
[Minimum Pass Marks : 29

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

- 1. Answer the following short answer questions:** **1x10=10**
- (a) In which plant of Gymnosperm coralloid root is present.
 - (b) Which is the smallest Gymnosperm.
 - (c) Which Gymnosperm plant known as living fossil.
 - (d) Who is the father of paleobotany in India?
 - (e) Which Gymnosperm plant is known as father of forest.
 - (f) Which type of root present in Gymnosperm.
 - (g) Which type of pollination found in Gymnosperm.
 - (h) Winged pollen grain found in which Gymnosperm.
 - (i) Needle like leaf found in which Gymnosperm.
 - (j) Highly evolved division of Gymnosperm.
- 2. Answer the following short type questions:** **2x5=10**
- (a) Ovule in Gymnosperm. (only diagram)
 - (b) What is lagenostoma lomaxi.
 - (c) Character of coniferous order.
 - (d) Draw well labelled diagram of cycas leaf let.
 - (e) Male cone of ephedra.

Section-B

15x4=60

Answer the following Long-Answer questions:

- 3. Describe complexity of female gametophyte of Gymnosperm.**
OR
Describe origin and evolution of Gymnosperm.
- 4. Describe Classification of Gymnosperm.**
OR
Describe distribution of Gymnosperm
- 5. Give general account and reproduction in Ginkgoales.**
OR
Give general account and reproduction in cordaitales.
- 6. Give general account of coniferales of gnetales.**
OR
Write notes:
a). Female cone of pinus
b). Male cone of Ginkgo