

SECOND SEMESTER EXAMINATION 2021-22

M.Sc. Botany

Paper - III

Taxonomy and Diversity of Gymnosperms

Time : 3.00 Hrs.

Max. Marks : 80

Total No. of Printed Page : 03

Mini. Marks : 29

Note:- Question paper is divided into three sections. Attempt question of all three section as per direction Distribution of marks is given in each section.

Section 'A'

Very short answer question (in few words)

Q.1 Attempt any six questions from the following :

6x2=12

- (i) Write the aims of Taxonomy.
- (ii) Why Gymnosperm plants do not produce fruits.
- (iii) Give the name of the orders which represent the most advanced Gymnosperm.
- (iv) Which Gymnosperm plant is called father of forest.
- (v) Which Gymnosperm plant are found in Resin secreting glands.
- (vi) Who is the father of Paleobotany in India.
- (vii) Write Life cycle of Gymnosperm is Diplontic or Haplontic.
- (viii) Give any two salient features of Glossopteris.
- (ix) What is Pollen grains.

(2)

- (x) Give any two characters of Cordaitales.

Section 'B'

Short answer type question (in 200 words)

Q.2 Attempt any four questions from the following : 4x5=20

- (i) Explain the female cone of Pinus.
- (ii) Draw well labelled diagram of T.S. of Cycas rachis.
- (iii) Explain the evolution of Gymnosperms.
- (iv) Give the general characters of Cycadales.
- (v) Write the uses of Ginkgo biloba.
- (vi) Draw well labelled diagram of L.S. of female flower of Gnetum.
- (vii) What is Medullosa ?

Section 'C'

Long answer/Essay type question.

Q.3 Attempt any four questions from the following questions : 4x12=48

- (i) Give classification of Gymnosperms proposed by D.D. Pant and Andrew.
- (ii) What are living gymnosperms ? Describe the characteristic features of living Gymnosperms.
- (iii) Where are Gymnosperms found in India ? Explain the how many species of Gymnosperm are found in India.
- (iv) Write notes on the following :

(3)

- (a) Lyginopteris oldhamia stem
- (b) Lagenostoma seed.
- (v) Give a general account of cordaitales ?
- (vi) Write about Pollen germination in Gymnosperm.
- (vii) Write about complexity of female gametophyte in Gymnosperms.

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