

This question paper contains 2 printed pages.

M.Sc. (P)

Roll No..

5644

Tax. & Div. of See. Pla.

M.Sc. (Previous) EXAMINATION - 2022

BOTANY

FOURTH PAPER

(Taxonomy & Diversity of Seed Plants)

Time Allowed: Three Hours

Maximum Marks: 100

1. Each theory paper will have 9 questions, out of which a student has to attempt 5 questions and the questions No. 1 will be compulsory. The question No. 1 will carry 20 mark and will be of short type of questions with a limit of 20 words.
2. No supplementary answer book will be given to any candidate. Hence the candidates should write the answer precisely in the main answer book only.
3. All the parts of one question should be answered at one place in the answer-book. One complete question should not be answered at different places in the answer-book.

1. Answer the following in short -

10x2=20

- (a) Write the name of edible Gymnosperms.
- (b) Define species.
- (c) Structure of Pinus pollen grain.
- (d) Distribution range of Ephedra foliata.
- (e) Explain OUT'S.
- (f) What is Topotype?
- (g) Define NPC formula?
- (h) Define the Omega taxonomy.
- (i) What is Cladogram?
- (j) What is Icons?

UNIT - I

2. Write short notes on the following :

10+10

- (a) Female gametophyte of Gymnosperms
- (b) Welwitschiales

OR

Describe general account on structure and reproduction of coniferales (in reference to Pinus). 20

UNIT - II

3. Write the salient features of Thorne's Classification of Angiosperms. 20

OR

Write short notes on :

10+10

- (a) Principle of priority
- (b) Taxonomic Hierarchy

UNIT - III

4. Write short notes on : 10+10

- (a) Cladistics
- (b) Cluster analysis

OR

10+10

Write short notes on :

- (a) Flora
- (b) Molecular techniques as a taxonomic tool

UNIT - IV

5. ~~Write a detailed note on the Cytological evidence in biosystematic studies~~ 20

OR

10+10

Write short notes on :

- (a) Ancestors of Angiosperm
- (b) Place of Angiosperm origin