Reg. No ..... Name **24P354**

MSc DEGREE END SEMESTER EXAMINATION- OCTOBER2024

SEMESTER 3 : BOTANY

COURSE : **21P3BOTT12 ; PLANT REPRODUCTIVE BIOLOGY, PALYNOLOGY AND PLANT BREEDING**

(For Regular 2023 Admission and Supplementary 2022/2021 Admissions)

Duration : Three Hours Max. Weights: 30

PART A

Answer any 8 questions **Weight: 1**

1.	Write a short note on NDC classification.	()
2.	What is herkogamy?	(U)
3.	What is chiropterophily? Give one example.	(U)
4.	What are the objectives of plant breeding?	(U)
5.	Define psychophily. Give an example.	(U)
6.	Explain the disease development.	(U)
7.	Explain pollen pistil interactions.	(U)
8.	Writea note on the achievements of mutation breeding.	(U)
9.	What is meant by melisso-palynology?	()
10.	Explain pollen rain.	()

(1 x 8 = 8)

PART B

Answer any 6 questions **Weights: 2**

11.	Explain the methods of pollen sampling from water bodies and archaeological deposits.	()
12.	Briefly explain the scope and relevance of palynology.	(U)
13.	Explain inbreeding depression. How is it overcome?	(U)
14.	Briefly explain the four major pollination syndromes in flowering plants with examples.	(U)
15.	Briefly explain the Indian contributions towards plant reproductive biology.	(U)
16.	Describe the mutations in oligogenic traits.	(U)
17.	Explain the different methods of breaking seed dormancy.	(U)
18.	Explain different mechanisms to overcome self-incompatibility in plants.	(U)

(2 x 6 = 12)

PART C

Answer any 2 questions **Weights: 5**

19.	Give an account on pollen viability and the various assays used to check it.	(U)
20.	'Plant- animal interaction is a mutually benefiting process to achieve effective pollination in flowering plant's, Discuss.	(E)
21.	Write an essay on the stages of megasporogenesis and different types of embryo sac development with examples.	(U)
22.	Enumerate the different ways of plant disease resistance.	(An)

(5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;