

C 41950

(Pages : 2)

Name.....

Reg. No.....

**FOURTH SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, APRIL 2023**

(CBCSS)

Botany

BOT 4E 01-6—GENETICS AND CROP IMPROVEMENT

(2019 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

I. Write short answer on any *four* of the following :

- 1 Define Mutagen. Name one chemical mutagen.
- 2 What is plant introduction ? Write the role of NBPGRI in plant introduction.
- 3 What are the different types of emasculation.
- 4 Define gene bank .Write an example.
- 5 Write the floral biology of coconut.
- 6 What are the steps involved in seed certification ?
- 7 Differentiate primary and secondary centre of origin of crop plants.

(4 × 2 = 8 weightage)

II. Write short essay on any *four* of the following :

- 8 Write an account on the different mechanisms promoting cross pollination.
- 9 Briefly explain the procedure of plant domestication.
- 10 Explain the floral biology and breeding techniques of cardamom
- 11 Write the procedure of release of a variety.
- 12 Give a brief account on the recombinant DNA technology
- 13 Write an account on the organic farming system and its importance
- 14 Give an account on the different types of mating systems in plants

(4 × 3 = 12 weightage)

Turn over

III. Write an essay on any *two* of the following :

- 15 Write an essay on the procedure for the production of polyploids.
- 16 Give an account on the conservation and utilization of crop genetic resources.
- 17 Write a short account on how IPR relevant in crop improvement programmes.
- 18 Explain the major achievements, merits and demerits of genetically modified plants.

(2 × 5 = 10 weightage)