Roll No. Total No. of Pages : 02

Total No. of Questions: 09

B.Sc. Hons. (Agriculture) (Sem.-6)
CROP IMPROVEMENT-II (RABI CROPS)

Subject Code: BSAG606-19 M.Code: 91797

Date of Examination: 29-05-2023

Time: 3 Hrs. Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

I. Answer Briefly:

- a) Anti-nutrition components of rabi fodders
- b) Ideotype
- c) CGMS system in Sunflower
- d) Gene pool of Lentil
- e) Meristem culture
- f) Single vs double cross hybrids
- g) Interspecific hybridization in berseem
- h) Nobilization of cane
- i) Antixenosis
- j) Virulence vs. Avirulence

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SECTION-B

- 2. Briefly discuss the breeding for fibre quality in cotton.
- 3. What are the different alternative strategies (other than the conventional breeding tools) employed for developing varieties or cultivars?
- 4. Discuss in detail, the breeding objectives and techniques in sugarcane.
- 5. List few strategies one should adopt for developing climate resilient crop varieties.
- 6. Define mutation. What are the characteristics of mutations and their role in plant breeding?

SECTION-C

- 7. a) What do you understand by ideotype concept? Elaborate this concept in rice.
 - b) What are the various breeding strategies to develop climate resilient wheat varieties in the light of current rising temperature during winter season?
- 8. a) What are the objectives and future thrust points of lentil/gram breeding?
 - b) What can be the various breeding strategies used in berseem improvement?
- 9. What are abiotic stresses? Enlist various abiotic stresses and their impact on yield and quality of crops. What are the various resistance mechanisms one breeder should look for to develop resistant varieties against these abiotic stresses?

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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