

Roll No.

Total No. of Pages : 02

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B.Sc- Honours (Agriculture) (Sem.-5)
CROP IMPROVEMENT I -KHARIF CROPS

Subject Code : BSAG-505-19

M.Code : 90944

Date of Examination: 21-12-2022

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **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

1. **Write briefly :**
 - a) Nutrition quality of Fodders
 - b) Antiquality components in pulses
 - c) CGMS system in Pearl millet
 - d) Gene pool of Sorghum
 - e) Bt Cotton
 - f) QPM
 - g) Interspecific hybridization in pulses
 - h) Golden rice
 - i) Antixenosis
 - j) Virulence vs. Avirulence.

SECTION-B

2. Briefly discuss the breeding for quality in cotton (fibre).
3. What is distant/wide hybridization? Explain briefly the various barriers and their solutions in wide hybridization.
4. Discuss in detail, the three lines system of hybrid seed production in pearl millet.
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. What is Reciprocal recurrent selection? Discuss the methodology employed for RRS and also mention their merits and demerits.
8. (a) What are the objectives and future thrust points of groundnut or pigeon pea breeding?
(b) What can be the various breeding strategies used in wheat improvement?
9. Describe the genetic basis of heterosis along with objections and explanations. Discuss the achievements in hybrid breeding in different crops from Indian perspective.

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.