

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

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

Subject Code : BSAG-505-19

M.Code : 90944

Date of Examination : 12-07-22

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 Brassica
- b) HCN in sorghum
- c) CGMS system in Sorghum
- d) Gene pool of Pearl millet
- e) Bt Cotton
- f) Antiquality components in *Fodders*
- g) Interspecific hybridization in pulses
- h) Golden rice
- i) PGR
- j) IPR

SECTION-B

2. What are various non-conventional breeding, approaches (biotechnological)? How MAS can be used as a potential tool for developing resistant varieties?
3. What is distant/wide hybridization? Explain briefly the various barriers and their solutions in wide hybridization.
4. Discuss in detail, the two lines system of hybrid seed production in rice.
5. List few strategies one should adopt for developing climate resilient crop varieties.
6. What are PGRs? How important is to conserve our PGRs as a breeder and their methods of utilization?

SECTION-C

7. What are abiotic stresses? Enlist various abiotic stresses and their impact on yield and quality of rice. What are the various resistance mechanisms one breeder should look for to develop resistant varieties against these abiotic stresses?
8.
 - a) What are the objectives and future thrust points of soybean or moong breeding?
 - b) What can be the various breeding strategies used in sorghum improvement?
9.
 - a) What is ideotype breeding? Discuss ideotype breeding in rice?
 - b) Discuss crop improvement in forage crops like maize/bajra.

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.