

[illegible]

**B.Sc (Agriculture) (Sem.-7)**  
**BREEDING OF FIELD CROPS**  
**Subject Code : BSAG-PGB-704**  
**M.Code : 77100**

**Max. Marks : 90**

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying THREE marks each.**
2. **SECTION-B contains FIVE questions carrying SEVEN AND A HALF (7.5) marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying FIFTEEN marks each and students have to attempt any TWO questions.**

**Q1. Write briefly :**

- a) Nutrition quality of Groundnut
- b) Quality Protein Maize
- c) CGMS system in Sorghum
- d) Gene pool of Pearl millet
- e) Bt Cotton
- f) Antiquity components in Brassica
- g) Interspecific hybridization in pulses
- h) Golden rice
- i) NBPGR
- j) CIMMYT and its role in crop improvement

**SECTION-B**

- Q2. Briefly discuss the inter-varietal and interspecific hybridization in upland cotton.
- Q3. What are the various challenges and achievements in sugarcane breeding?
- Q4. Describe the breeding status for various quality traits in barley (feed, food and malt) in Punjab and India.
- Q5. List various national and international institutes engaged in plant breeding. Discuss the objectives and role of ICRISAT.
- Q6. Elaborate the evolutionary history of wheat. Enlist wild species of different ploidy levels in wheat that are being exploited for useful gene introgressions.

**SECTION-C**

- Q7. a) Discuss the breeding objectives and procedures for development of varieties and hybrids in maize.
- b) Discuss breeding objectives, constraints and methods of breeding berseem as a fodder crop.
- Q8. a) What are the future thrust points of soybean breeding?
- b) What can be the various breeding strategies used in sorghum improvement?
- Q9. a) Discuss the pearl millet breeding programme status in Punjab and India.
- b) Discuss U's triangle of Brassica.

**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.**