## M.Sc. (Agri) – Genetics and Plant Breeding

## **Programme Outcomes**

To provide

1. The basics of classical to molecular plant breeding including biotechnological, quantitative, and genomic techniques.

2. Skill in self-designing, regional and crop specific plant breeding programs linking conventional and modern techniques; selection strategies for development of new varieties.

3. Competency in collection, investigation and analysis of data sets using statistical software; interpretation of the genetic results to arrive at meaningful conclusions.

4. Insight about various biotechnological tools, tissue culture techniques, principles behind transgenic crops and its ethical implications.

5. Understand the importance of quantitative genetic analysis, identifying the genes and QTL analysis.

6. Proficiency in mapping population, molecular marker assisted selection and its application in crop improvement.

7. Significance of germplasm, biodiversity conservation in relation to Plant Variety Protection and Intellectual Property Rights.

8. Knowledge and expertise in genomics, proteomics, bioinformatics and gene editing technologies.

## M.Sc. (Agri) – Seed Science and Technology

## **Programme Outcome**

1. Learn the meaning of seed, its structure, development and maturation and their importance in crop production

2. students will acquire knowledge and basic principles related to quality seed production of varieties and hybrids in agricultural and horticultural crops

3. To promulgate knowledge about mechanism involved in dormancy and stress management for quality seed production

4. To initiate basic methods and principle related to seed quality testing and seed standards

5. To disseminate the knowledge on seed laws related to quality control programme for the needy fast growing seed sector

6. To set forth basic knowledge on various processing operations and principles involved in successful seed storage.

7. To encourage the students to become an entrepreneurship in seed production & seed business.