

PROGRAMME: MASTER OF SCIENCE BOTANY (MSCBOT-21)

Semester: Second

Course code: MSCBOT-507

COURSE NAME: CYTOGENETICS AND PLANT BREEDING

BLOCK-1-INTRODUCTION TO PLANT BREEDING

- Unit-1 Genetic variability
- Unit-2 Plant breeding: Concept, Objectives, Achievements and Scope
- Unit-3 Plant Breeding methods

BLOCK-2-PLANT BREEDING FOR SPECIFIC

- Unit-4 Male sterile and Heterosis breeding features
- Unit-5 Apomixis: Application in plant breeding
- Unit-6 Resistance Breeding for Temperature, Frost, Salt and Acid tolerance, Lodging and Diseases

BLOCK-3-CYTOGENETICS

- Unit-7 Development of Genetics
- Unit-8 Extra chromosomal inheritance in plants, Cytoplasmic Male Sterility
- Unit-9 Sex determination and Sex linked inheritance
- Unit-10 Linkage and Crossing over, Mutation