

**PROGRAMME: MASTER OF SCIENCE BOTANY (MSCBOT20)**

**Year/ Semester: IV<sup>th</sup> semester**

**Course Code: MBOT-609**

**Course Name: BIOTECHNOLOGY**

**Syllabus**

**BLOCK – I: BIOTECHNOLOGY – I**

Unit –1: Introduction to Plant Tissue Culture and in vitro Morphogenesis

Unit –2: Anther, Pollen and Ovule Culture

Unit –3: Cryopreservation of Plant Cells and Tissues and Germplasm storage

Unit –4: Protoplast Culture and Somatic Hybridization

**BLOCK – II: BIOTECHNOLOGY – II**

Unit –5: Transgenic Plants

Unit –6: Plant Genomics and Proteomics

Unit –7: Plants Metabolomics

Unit –8: Intellectual Property Rights and Bio-safety