

## Faculty of Agricultural Sciences

### M.Sc. (Agriculture) Agronomy

#### Section I

General awareness in agriculture and related branches of science, life science and biological sciences.

#### Section II

Principles of Agronomy, crop ecology and geography and Agricultural Meteorology; Tillage, crop stand establishment and planting geometry and their effect on crop, Organic farming, precision farming, integrated farming systems, principles of field experimentation. Agro-ecological regions in India, Climatic factors and their effect on crop productivity, weather & climate, Atmospheric temperature and global warming. Field crops: Origin, distribution, economic importance, soil and climatic requirement, varieties, cultural practices and yield of cereals, pulses, oilseeds, fibre crops, sugar crops, fodder and foragecrops and commercial crops. Weed management: Principles of weed management, classification of weeds, crop weed competition and allelopathy, concepts and methods of weed control, IWM, classification, formulations. Water management: Principles of irrigation, water resources and irrigation development in India. Essential plant nutrients and their deficiency symptoms, slow release fertilizers, nitrification inhibitors, principles and methods of fertilizer application, INM, SSNM. Dryland Agronomy : Characteristics of Dryland farming and delineation, constraints of Dryland farming in India, Types of drought. Watershed management. Sustainable land use systems: Sustainable agriculture: parameters and indicators, conservation agriculture, safe disposal of Agri-industrial waste, Agro-forestry systems, shifting cultivation, Alternate land use systems, Wastelands and their remediation for crop production.