

Subject Name	Description
Agricultural Finance and Co-operation	The students will know about time value of money, compounding and discounting, agricultural credit, and higher financing agencies-RBI, NABARD, AFC, Asian Development Bank, World Bank. Insurance and Credit Guarantee Corporation of India, assessment of crop losses: determination of compensation, crop insurance, advantages and limitations in application, estimation of crop yields
Irrigation Water Management	The learners will learn about the Importance and role of water in crop production, irrigation, Components of water potentials, method of soil moisture estimation, evapo-transpiration, crop water requirement and effective rainfall, scheduling and methods of irrigation, irrigation strategies under limited water conditions. Irrigation efficiency and water use efficiency and micro/pressure irrigation
Field Crops - I (Kharif Crops)	The students get information related to Origin, geographic distribution, economic importance, soil and climatic requirement, varieties of different Kharif Crops, Manuring, water management, Agronomic principles involved in Production of Kharif crops.
Principles of Plant Breeding	The students will learn about floral biology, emasculation and pollination techniques in cereals, millets, pulses, oil seeds, fibers, plantation crops etc. Differences between self and cross pollinated crops, methods of breeding: introduction and acclimatization, selection, mass selection. Methods of handling of segregating generations. Single cross and double cross hybrids.
Principles of Agricultural Biotechnology	Introduction of plant tissue culture and plant genetic engineering, Anther culture, pollen culture, ovary culture, embryo culture, endosperm culture, somaclonal variation, Products of somatic hybrids and cybrids, applications in crop improvement, genetic engineering
Plant Pathogens and Principles of Plant Pathology	The students will learn about important plant pathogenic organisms, survival and dispersal of plant pathogens; phenomenon of infection: pre-penetration, penetration and post penetration, plant quarantine and inspection. Role and mechanisms of biological control and PGPR; physical and chemical methods, methods of application of fungicides; host plant resistance
Manures, Fertilizers and Agro-Chemicals	The students will learn about methods of composting, Fertilizers: classifications, manufacturing processes and properties of major fertilizers. diverse types of agro-chemicals, properties and uses of herbicides.
Production Technology of Vegetable Crops	The learners will know about role of vegetables in human nutrition, Fundamentals of vegetable production; types of vegetable gardening, POP for vegetables.