4. SDCA-04: On-farm practices of agricultural Waste management

Total Hours: 30

Course Objectives:

- 1. To impart knowledge to students on various methods of agricultural waste management for eco-friendly energy and manure production.
- 2. To develop an understanding of some identified areas of organic farming
- 3. To develop skills at the village level in organic management practices with a special focus on soil health base crop management
- 4. To create job opportunities in the organic sector, particularly in the area of organic production

Course outcomes:

- 1. To acquaint with on-farm resource management under organic farming.
- 2. To understand soil health base crop management
- 3. To develop the skill of input production and quality control.
- 4. To be aware the traditional Biofertilizers, Biopesticides and Soil health promoters.
- 5. To learn nutrient management and plant protection including formulation techniques.
- 6. To develop the skills at the village level required for organic farming practices and related marketing economics.

Syllabus

Unit I

Introduction, Concept, Philosophies, Principles and Need of organic farming

Unit II

Soil health: the prime need in organic management. Organic farming an integrated approach. Traditional organic input preparation/formulation of Biofertilizer, biopesticides, plant health promoters like Panchgavya, Beejamrut etc

Unit III

Manure preparation and introduction to compost. Methods of composting – vermicomposting, Shivansh khad - Factors involved, Infrastructure required, maturity parameters, value addition and application methods

Unit IV

Crop management, Nutrient Management and Pest Management and Multilayer cropping system base farm planning.

Unit V

System of organic certification and inspection. Standards and guidelines of NPOP (National Programme for organic production). Branding of rural products, FSSAI, marketing and packaging of organic produce.

References:

- 1. Dahama, A.K.2009. Organic farming for sustainable agriculture, Agrobros publishers.
- 2. Mukund Joshi. 2015. Sustainability to Organic Farming, Kalyani publication
- 3. Arun Kumar Sharma 2008. A Handbook of organic farming. Agrobios Publishers.

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