

# हिमाचल प्रदेश केंद्रीय विश्वविद्यालय Central University of Himachal Pradesh

(Accredited by NAAC with 'A+' Grade with CGPA of 3.42) शाहपुर परिसर , ज़िला कॉगड़ा, हिमाचल प्रदेश -176206



(पादप विज्ञान विभाग / Department of Plant Sciences)

Course Name: Principles of Organic and Natural farming

Course Code: PLS 419

Credits: 02

## **Course Outcomes:**

By successfully completing the course, the student will be able:

- To gain the theoretical knowledge in Organic Farming Practices
- To Learn a means of self-employment and income generation

## UNIT-1

Why Organic Farming, Concept and Principles of organic farming; Historical development of Organic Framing / Agriculture, Advantages and Disadvantages.

# UNIT-2

Natural Farming, Integrated and Mixed Farming system, Types of organic manure-Green manure. Farm Yard Manure, Farm compost, Urban waste compost, Rural waste compost, Vermi-compost.

#### UNIT-3

Chemical fertilizers and their impact on environment, Organic farming- benefits and impacts. Bioformulations and Bio-Pestisides, Effective Microbial Technology in Organic Farming

### UNIT-4

Concept of Compost and Mulching: methods, types, Application of compost and mulching. Soil Health and Nutrient Management, Integrated Pest and Disease Management, Weed control.

## **UNIT-5**

Organic Food Production and Processing, Economics of organic farming, Indian National, Standards for organic products, Marketing of Organic Products, Organic certification of farms.

# Reference Books:

- 1. Sarath Chandran, Unni M.R and Sabu Thomas. 2018. Organic farming. Woodhead Publishing, UK.
- 2. Reddy, S.R.2017. Principles of organic farming. Kalyani publishers, India
- 3. Ranjan Kumar Biswas. 2014. Organic farming in India. New Delhi Publishers, India.
- 4. Peter Fossel. 2014. Organic Farming: How to Raise, Certify, and Market Organic Crops and Livestock. Reprint edition, Voyageur Press, USA.
- 5. Organic farming-Theory and Practice by S.P. Palaniappan and K. Annadurai
- 6. Organic crop production (Principles and practices Vol-1: Principles and General Aspects) by J. P. Sharma

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