

## ORGANIC FARMING

Semester	Subject Code	Category	Lecture		Theory		P	C
III	21NBT3A	Non Major Elective - I	2hrs per week	30	2 hrs per week	30	0	2

### COURSE OBJECTIVE:

- Understand about history and scope of organic farming and describe farm management systems and soil, crop and pests and livestock management

### COURSE OUTCOMES:

Up on successful completion of course, students will be able to

CO NUMBER	CO STATEMENT	KNOWLEDGE LEVEL ( K1-K4)
CO1.	Understand the nature, history and scope of organic farming and demonstrate types of organic farming	K2,K3
CO2.	Explain pasture varieties and crops	K4
CO3.	Remember Weed management and pest management	K1
CO4.	Summarize livestock management systems	K2
CO5.	Analyze various management issues	K4

**Knowledge level:** K1- Remember; K2- Understand; K3- Apply; K4- analyze

### MAPPING WITH PROGRAMME OUTCOMES:

COS	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	S	M	M	M
CO2	M	M	M	S	M	M
CO3	S	S	M	M	M	M
CO4	M	M	M	S	M	M
CO5	M	M	M	M	S	S

S-strong; M- medium; L-low

**UNIT: I-CONCEPTS IN ORGANIC FARMING****6 Hours**

Introduction to Organic farming, organics, nature, history, types of organic farming and scope of organic farming, mulching, permaculture, polyculture, biodynamics, Green manures, organic fertilizers, biofertilizers etc.

**UNIT: II-PASTURES AND COVER CROPS FOR ORGANIC FARMS****6 Hours**

Pasture Varieties, nitrogen fixation correct seed mix, Crops –Wheat, Plant Fibre, Hay and Silage, Mung Beans and Sesame seed. Cover Crops for organic farms-Benefits and limitations of cover crops

**UNIT: III -WEED MANAGEMENT AND PEST MANAGEMENT-****6 Hours**

Weed biology, cultural weed control, Controlling weeds by Tillage and cultivation, controlling weeds by mowing, Flame weeding, Soil 25mmune25ia25ti of weed control, Biorational control of weeds, biological pest control methods

**UNIT: IV- LIVESTOCK MANAGEMENT****6 Hours**

Organic livestock farming- Introduction, Animal nutrition, Animal housing and Breeding, Principles of organic livestock farming, Consumer benefits, Producer benefits, Environmental benefits. Organic livestock and animal welfare, Animal management- General principles, Animal sources- Beef, Dairy, Sheep.

**UNIT: V- ORGANIC MANAGEMENT ISSUES****6 Hours**

Organic Management Issues –certification, environmental concerns, marketing, Organic Soil Management, Soil tillage in organic farming systems and Crop Nutrition, composting

Distribution of Marks: Theory 80% and Problems 20%

**Teaching Methodology**

- Class room teaching
- Assignments
- Discussions
- Home work
- PPT presentations
- Seminars
- Models/Charts
- Problems

**Text Books:**

S.NO.	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1.	Peter V. Fossel	Organic Farming: Everything You Need to Know	Voyageur Press	2007

2.	Ann Larkin Hansen	The Organic Farming Manual: A Comprehensive Guide to Starting and Running a Certified Organic Farm	Storey Publishing	2010
3.	William Lockeretz	Organic Farming: An International History	Cromwell Press	2007
4	Peter V. Fossel	Organic Farming	Voyageur Press	2007
5	William Lockeretz	Organic Farming	CABI	2007

#### REFERENCE BOOKS:

S.NO.	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1.	NPCS Board of Consultants & Engineers	The Complete Book on Organic Farming and Production of Organic Compost	Asia Pasific business press	2010
2.	Munish Kumar Verma	Organic Farming	Sankalp publications	2019
3.	Rana .S	Organic Farming	CSKHPKV	2011
4.	Meena.R.P	Concept of Organic Farming	Popular Kheti	2013
5.	Navdanya	Principles of Organic Farming	System vision, A-199Okhila Phase-1	2004

#### Web Sources:

1. <https://www.hortcourses.com/courses/organic-farming-624.aspx>
2. [http://agritech.tnau.ac.in/org\\_farm/orgfarm\\_introduction.html](http://agritech.tnau.ac.in/org_farm/orgfarm_introduction.html)
3. <http://www.omafra.gov.on.ca/english/crops/facts/09-077.html>
4. <https://www.thebalancesmb.com/best-books-for-organic-farmers-2538068>
5. <https://www.agrimoon.com/organic-farming-pdf-book>

#### Syllabus Designer:

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