# SELF STUDY PAPER (OPTIONAL) ORGANIC FARMING

Semester	Subject	Category	Lecture		Theory		Practical	Credits
	Code		Hrs/ week	Total Hours/ Semester	Hrs/ week	Total Hours/ Semester		
I	POCZO1SS	Self study paper	-	-	-	-	Nil	2(extra)

# **COURSE OBJECTIVES**

- The course will provide an adequate hands on experience for the students towards an independent handling and capability to produce organic farm.
- Subject content is so designed and hence the students can avail to become an entrepreneur herself.

# **COURSE OUTCOMES**

On the successful completion of the course, students will be able to:

CO	CO Statement	Knowledge Level
Number		(K1-K4)
CO1	To understand about the scope and benefits of organic farm.	K2
CO2	To learn about the classification and types of biofertilizers	K1
CO3	To Update the knowledge on pest control and pest management.	K4
CO4	To acquire knowledge on the methods of plant production in organic forming.	K4
CO5	To get employment opportunities in the Entrepreneurship development.	K2

Knowledge Level: K1-Remember; K2 – Understand; K3 – Apply; K4 – Analyze

# MAPPING WITH PROGRAMME OUTCOMES

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

S- Strong; M – Medium; L- Low

**DISTRIBUTION OF MARKS: THEORY 100%** 

#### **UNIT-I**

#### CONCEPT OF ORGANIC FARMING

**Introduction to Organic Farming**- Scope, Concept, Development, Principles and Need for Organic Farming. Agencies and Institutions related to Organic Agriculture- Types of Organic Farming- Biodynamic Farming- Benefits and Present State of Organic Farming- Requirements -Components for an Organic Farm.

#### **UNIT-II**

## **VERMICOMPOSTING**

Earthworms- Introduction-Classification and Biology of Lampito marutii.

**Vermicomposting Methods** –Anaerobic (Pit) and Aerobic (Heap) method, Tank method, Bin method and Wormery. Harvesting the Compost.

**Bio-fertilizers**- Introduction, Types of Bio-fertilizers-Advantages of using Biofertilizers in Agriculture.

#### **UNIT-III**

#### PEST CONTROL AND PEST MANAGEMENT

**Pest Control-** Use of Bio-control agents, Bio-pesticides, Pheromones, trap crops.

**Pest Management-**Introduction-Culture Practices. Biological Pest Management with the Agrivi Farm, Botanical Powder Formulations- Integrated diseases and Pest Management.

#### **UNIT-IV**

## PLANT PROTECTION IN ORGANIC FARMING:

**Plant Protection** –Introduction-Organic-Integrated and Conventional methods. Plant Protection Strategies in Organic Farming.

**Prevention Methods-** Nutrition Management-Cultivation Practices-Crop rotation.

#### **UNIT-V**

#### ENTREPRENEURSHIP DEVELOPMENT

**Entrepreneurship**- Concept, Characteristics, Approaches and Need for Entrepreneurship. Agri-Enterprises- Stages of Establishing Enterprise, Project Identification, Step to be Considered in Setting up an Enterprise, Feasibility Report- Product Selection.

**Project Management and Appraisal** – Market, Technical, Social, Financial Analysis. Planning for Marketing, Target Marketing and Competitive Strategy.

#### **TEXT BOOKS**

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1.	Kristensen, P., Taji, A. and Reganold, J.	Organic Agriculture	Global publishers	2006
2.	Altieri, M.	Agroecology	The Science of Sustainable Agriculture.	1990

3.	Bavec, F. and Bavec, M.	Organic Production and Use of Alternative crops	University of maribore	2007
4.	Joshi, M., Setty, T.K.P. and Prabhakarasetty	Sustainability through organic farming	Kalyani publications	2006
5.	David Oates,	A Guide to Entrepreneurship	Jaico Publishing House, Mumbai, Edn	2009

# **REFERENCE BOOKS**

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF
				<b>PUBLICATION</b>
1.	Atwal, A. S.	Agricultural Pests of	Kalyani	1991
	•	India and South -	Publishers, New Delhi.	
		East		
2.	C.Jayanthi	Organic farming	1stEdition.Kalyani	2006
			Publishers, Ludhiana,	
			India	
3.	Agarwal, R.L	Seed Technology	Oxford and IBH	1995
			Publication Co., New	
			Delhi.	
4.	Dhirendra	Seed Technology	Scientific Publishers	2007
	Khare and		(India), Jodhpur	
	Mohan S.			
	Bhale.			
5.	Collins and	Beyond	Prentice Hall, New	1992
	Lazier W	entrepreneurship	Jersey	

# **WEB SOURCES:**

www.livescience.com

www.sciencemag.com

www.treehugger.com

www.nature.com

# TEACHING METHODOLOGY

- Class room teaching
- Assignments
- Discussions
- Home test
- PPT Presentation
- Demonstration from the Video slides, videos and interactive software.

# **SYLLABUS DESIGNERS**

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