SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE COURSE IN ORGANIC FARMING

FIRST YEAR - FIRST SEMESTER (Syllabus under CBCS w.e.f. 2020-21)

Course-I: BASIC CONCEPTS OF ORGANIC FARMING

(Total hours of teaching – 60 @ 04 Hrs./Week)

Theory:

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

- > Develop a critical understanding of ill effects of conventional farming and benefits of organic farming.
- > Demonstrate skills on different composting methods.
- Explain the various methods for crop protection.
- > Acquire managerial skills of organic farming.

Unit – 1: Introduction to Organic Farming

12 Hrs.

- 1. Organic farming: Introduction and status.
- 2. Organic farming and its components.
- 3. Organic farming Concepts and principles.
- 4. SWOT Analysis of Organic Farming.

Unit – 2 : Sustainable Agriculture

12 Hrs.

- 1. Sustainable Agriculture.
- 2. Key indicators of sustainable agriculture.
- 3. Organic farming and climate change.
- 4. Principles of compost production.

Unit – 3: Vermicompost Production Technology

12 Hrs.

- 1. Vermicompost production technology.
- 2. Enriched Vermicompost production technology.
- 3. Vermicompost quality and marketing.

Unit – 4: CropProtection

12 Hrs.

- 1. Introduction to pest and disease Management.
- 2. Pest and disease management in organic farming preventive methods.
- 3. Pest and disease management in organic farming physical and mechanical methods.
- 4. Pest and disease management in organic farming using allowed bio-pesticides.

Unit – 5 : Basics of Organic Crop Management

12 Hrs.

- 1. Introduction to Organic Crop Management land preparation, planting technic, nutrient management.
- 2. Factors considered for nutrient management; recommended nutrient quantity blanket, major problems; balance sheet method.
- 3. Nutrient composition of some organic resources, right timing of nutrient application.
- 4. Right method of nutrient application, nutrient use efficiency.

Books for Reference:

- Rana, S.S., 2016. Organic Farming, CSK Himachal Pradesh KrishiVishvavidyalaya, Palampur
- MamtaBansal, 2020. Basics of Organic Farming, CBS Publihers and Distributors Pvt.Ltd., New Delhi
- Palaniappan, S.P., & .Annadurai, 2016. Organic Farming: Theory and Practice, Scientific Publishers, Jodhpur
- **Reddy, S.R., 2017.** Principles of Organic Farming, Kalyani Publishers, New Delhi
- Organic Farming for Sustainable Agriculture, https://nptel.ac.in/courses/126/105/126105014/#

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE COURSE IN ORGANIC FARMING

FIRST YEAR - FIRST SEMESTER (Syllabus under CBCS w.e.f. 2020-21)

Practical Paper-I: BASIC CONCEPTS OF ORGANIC FARMING

(Total hours of laboratory exercises 30 Hrs. @ 02 Hrs./Week)

Course Outcomes: On successful completion of this course students shall be able to:

- ➤ Identify various sources of organic manures and can apply them in farming.
- > Prepare FYM and compost and use them for organic farming.
- 1. Study of various implements used in Agriculture.
- 2. Study of different green manures and their morphological features.
- 3. Studying the earth worm species used to make vermicompost.
- 4. Studying various types of organic manures.
- 5. Trench method of preparing Farm Yard Manure (FYM).
- 6. Quality and composition of FYM.
- 7. Composting –Bangalore process.
- 8. Composting Coimbatore process.
- 9. Making a vermicompost bed and vermicompost pit.
- 10. Steps in making vermicompost (bed and pit method), harvesting and precautions.

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE EXAMINATION IN ORGANIC FARMING

FIRST YEAR - FIRST SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

Course – I: BASIC CONCEPTS OF ORGANIC FARMING <u>MODEL QUESTION PAPER</u>

Time: 3 hours Marks: 75 marks

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer any five of the following questions in

Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries

10 marks

PART - A

Answer any *Five* of the following question.

(5X5=25M)

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

PART – B Answer All The Questions. Each question carries 10 marks (5X10= 50M)

1.	(A)	
		OR
	(B)	
2.	(A)	
		OR
	(B)	
3.	(A)	
		OR
	(B)	
4.	(A)	
		OR
	(B)	
5.	(A)	
		OR
	(B)	

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE EXAMINATION IN ORGANIC FARMING

FIRST YEAR - FIRST SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

Practical Paper – I: BASIC CONCEPTS OF ORGANIC FARMING MODEL QUESTION PAPER

Ma	Max. Time: 3 Hrs. Max. M		
1.	Experiment 'A' (Demonstrate procedure for preparing farm yard ma	anure.) 10 M	
2.	Experiment 'B' (Demonstrate a process of composting.)	10 M	
3.	Experiment 'C' (Demonstrate procedure of making vermicompost bed/pit or steps in		
	making vermicompost)	10 M	
4.	Identify the following and justify with reasons	$2 \times 5 = 10 M$	
	D. Implement used in Agriculture		
	E. Green manure/organic manure		
5.	Record + Viva voce	5 + 5 = 10 M	

Suggested co-curricular activities for Organic Farming Core Course -1 in Semester-I:

A.Measurable:

a. Student seminars:

- 1. Historical account of Organic Farming.
- 2. Ideological differences between organic and conventional (chemical) farming.
- 3. Relevance of Organic Farming in the present context.
- 4. The international scenario of organic farming.
- 5. Masanobu Fukuoka Japanese natural farming.
- 6. Perma Culture -Bill Mollison.
- 7. Biodynamic agriculture.
- 8. Ecological Farming.
- 9. Palekar model.
- 10. Green Revolution a boon or bane.

b. Student Study Projects:

- 1. A study report on Agriculture and climate change.
- 2. A case study on ill effects of chemical fertilizers and pesticides on human health in India.
- 3. A study report on export and import of organic food products in India.
- 4. A report on organic agriculture and horticulture in his/her native district.
- 5. A report on government initiatives towards organic farming.
- 6. A test report on composition and quality of compost.
- 7. A study report on loss of nutrients during preparation, handling and storage.
- **c. Assignments**: Written assignment at home / during '0' hour at college; preparation of charts with drawings, making models etc., on topics included in syllabus.

B. General:

- 1. Group Discussion (GD)/ Quiz/ Just A Minute (JAM) on different modulesin syllabus of the course.
- 2. Visit to organizations working on Organic Farming/ interaction with farmers practicing O.F.