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

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

Course – II: PRACTICES IN 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 :

- Cultivate various crop plants using principles of organic farming.
- Realize the importance of Integrated Farming System for production of quality products.
- > Explain the benefits of organic products as food and fodder.
- Develop critical understanding on organic certification process and marketing of produce.

12 Hrs. Unit - 1 : Organic Crop Management -1 1. Organic vegetable crop management - Potato 2. Organic vegetable crop management – Tomato. 3. Organic food crop management – Rice 4. Organic food crop management - Wheat Unit – 2 : Organic Crop Management -2 12 Hrs. 1. Organic pulse crop management - Red gram 2. Organic oil seed crop management - Ground nut 3. Organic fruit crop management – Mango 4. Organic plantation crop management – Tea **Unit – 3 : Transition to Organics** 12 Hrs. 1. Introduction on transition to organic crop production. 2. Crop planning and rotation design in organic system. 3. Integrated Farming System (IFS) and urban agriculture. 4. Quality of organic food. Unit – 4 : Organic foods – benefits 12 Hrs. 1. Natural sources of antioxidants for health defense. 2. Antioxidant capacity of fruits and vegetables. 3. Organic food and human health. 4. Organic standard. Unit – 5 : Certification and Marketing of Organics 12 Hrs. 1. Organic certification process - definition, need, aim and scope, requirements to maintain certification. 2. Organic certification process – labeling of products, NPOP, organic quality control, standards, accreditation, inspection and certification.

- 3. Operational structure of organic certification.
- 4. Marketing of organic products.

Books for Reference :

- Vandana Shiva, PoonamPandeandJitendra Singh, 2004. Principles of Organic Farming - Renewing the Earth's Harvest, Navdanya, New Delhi.
- SujitChakrabarty, Sumati Narayan, Farooq Ahmad Khan, 2019. Arts and Science of Organic Farming, Purna Organics
- Thapa, U., and P. Tripathi, 2016. Organic Farming in India, AgrotechPublictions, Udaipur
- Peter, V. Fossel, 2007. Organic Farming (Everything You Need to Know), Voyageur Press, USA
- > 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 - SECOND SEMESTER (Syllabus under CBCS w.e.f. 2020-21)

Practical Paper – II: PRACTICES IN ORGANIC FARMING

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

Course Outcomes: On successful completion of this course, the students shall be

able to :

- Prepare organic biostimulants and apply them at various growth stages of crop plants.
- > Make biocontrol products for organic farming.
- > Demonstrate skills on various cropping systems in organic farming.
- 1. Preparation of Jeevamrutham (liquid and solid).
- 2. Preparation of Beejamrutham.
- 3. Preparation of Neemastram.
- 4. Preparation of Brahmastram.
- 5. Preparation of Agniastram.
- 6. Preparation of Dasaparnikashayam.
- 7. Study of mulching.
- 8. Study of intercropping method.
- 9. Study of water management in Organic Farming.
- 10. Study of live stock component in Organic Farming.

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

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

Course – II: PRACTICES IN ORGANIC FARMING MODEL QUESTION PAPER

Time: 3 hours 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.

9. 10. 11. 12. 13. 14. 15. 16.

PART – B

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

6.	(A)	
		OR
	(B)	
7.	(A)	
		OR
	(B)	
8.	(A)	
		OR
	(B)	
9.	(A)	
		OR
	(B)	
10.	(A)	
		OR
	(B)	

Marks: 75 marks

(5X5=25M)

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

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

Practical Paper– II: PRACTICES IN ORGANIC FARMING MODEL QUESTION PAPER

Max. Time: 3 Hrs. Max	k. Marks: 50		
1. Experiment 'A' (Preparation of Jeevamrutham/Beejamrutham)	10 M		
2. Experiment 'B' (Preparation of Neemastram/Brahmastram/Agniastr	ram) 10 M		
3. Experiment 'C' (Mulching or inter cropping practice)	10 M		
4. Identify the following and justify with reasons	$2 \ge 5 = 10 M$		
D. Irrigation method			
E. Live stock component			
5. Record + Viva voce	5 + 5 = 10 M		
Second day and index of it's for Orean's Forming Company 2 in Secondary H			

Suggested co-curricular activities for Organic Farming Core Course -2 in Semester-II: A.Measurable :

a. Student seminars :

1. Chemical fertilizers-history, practical aspects, positive and negative aspects of chemical fertilizers.

- 2. Bio-intensive nutrient management.
- 3. Soil populations and processes.
- 4. Principles of microbial degradation Action of microorganism.
- 5. Losses of nutrients from FYMduring preparation, handling and storage.
- 6. Ways to minimize the losses from FYM during handling.
- 7. Integrated Farming system (Combination of Organic and Inorganic).
- 8. Different cropping systems in relation to Organic Farming.
- 9. Plant nutrients and their functions in plant growth and development.
- 10. Recycling of organic matter in organic Agriculture.
- 11. Organic Agri-Horticulture in Urban & Semi urban areas of India.

12. Importance of Neem in organic Agriculture.

b. Student Study Projects:

- 1. A case study on organic farming of a horticulture crop from beginning to ending.
- 2. A case study on organic farming of a food crop from beginning to ending.
- 3. A case study on organic farming of a pulse crop from beginning to ending.
- 4. A case study on organic farming of a fruit crop from beginning to ending.
- 5. A case study on organic farming of a plantation crop from beginning to ending.
- 6. A study on economics of a crop in conventional and organic farming methods.
- 7. A case study on getting certification for an organic farm product.
- 8. A report on soil chemistry in a conventional and organic crop field.

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 modules n syllabus of the course.

2. Visit to organizations working on Organic Farming/ interaction with farmers practicing O.F.