

- 1116 -

**DEPARTMENT OF BOTANY**  
**M.D. UNIVERSITY, ROHTAK**

**Syllabus and SOE of the Certificate Course on:**  
**Natural Farming: An Integrated Approach**

<b>Name of the course</b>	<b>Natural Farming: An Integrated Approach</b>	<b>Course Credits (04)</b>	<b>L:</b> 02	<b>T:</b> 00	<b>P:</b> 02
<b>Course Code</b>	<b>24BOTEEO1</b>		<b>Practical: 50</b>		
<b>Maximum Marks:100</b>	<b>Theory: 50</b> <b>Internal: 15</b> <b>External: 35</b>		<b>Internal: 15</b> <b>External: 35</b>		

**Note:**

1. Theory external exam : 35 Marks of 2 hrs duration
1. Examiner will set nine questions from Unit I to IV.
2. Question No. 1 will be of short answer type and covering Unit I to IV. It will be compulsory and of 07 marks
3. Examiner will set two questions from each Unit I to IV carrying equal marks. The student should answer four questions selecting one from each unit.

**Learning Objectives:**

1. To enable the students about concept of natural farming.
2. To acquaint the students about management of pests, insects and weed problems in natural farming
3. To enable students to learn about the quality control and certification of organic crops.
4. To understand preparation of various composts and biofertilizers essential for natural farming

**Learning Outcomes:**

1. Students will be able to produce natural crops.
2. Students will be the experts of pests, insects and weed management in natural farming
3. They will be Able to formulate bio-composts and biofertilizers.
4. They will be able to preserve mother earth by adopting natural farming practices.

**UNIT-I**

Need and benefits of Natural Farming, Methods for enhancing soil fertility, mulching, raising green manure crops. Indigenous methods of compost, Panchagavya, Biodynamics, preparation etc. Pest and disease management in natural farming; ITK's in natural farming. Role of botanicals and bio-control agents.

**UNIT-II**

Managing soil fertility, pests and diseases and weed problems in natural farming system; crop rotation in natural horticulture; processing and quality control for organic foods.

**UNIT-III**

Importance, principles, perspective, concept and component of natural production of vegetable crops. Natural production of vegetables crops viz solanaceous crops, cucurbits, cole crops, root and tuber crops.

**UNIT-IV**

GAP and GMP-Certification of natural and organic products; export-opportunity and challenges.