

SEC-Organic Farming

Cooch Behar Panchanan Barma University

Learning Outcome

Organic farming course aims to equip learners with the knowledge and skills necessary to practice sustainable agriculture while promoting environmental stewardship and the production of healthy, organic food. Specific outcomes are the following:

1. Practical skills: Students will gain hands-on experience through fieldwork, farm visits, or practical exercises to apply their knowledge in a real-world setting.
2. Ethical and social considerations: The course will address the ethical implications of organic farming, such as fair-trade practices, social responsibility, and community involvement.
3. Marketing and economics: Students will learn about marketing organic products, understanding consumer demand, and the economic aspects of organic farming.
4. Understanding organic principles: Students will gain a thorough understanding of the principles and philosophy behind organic farming, including the importance of sustainability, biodiversity, and ecological balance.
5. Soil health and fertility: Learners will explore the significance of soil health in organic farming and various methods to enhance soil fertility through composting, cover cropping, and crop rotation.

Syllabus

Semester I

Project Work on the following topics (any two), submit one report of minimum 10 pages and one presentation at the end of the semester with viva-voce

Topics:

1. Reduction of crop production due to depletion of soil Health
2. Concept of different cropping systems in relation to Organic Farming (Inter cropping etc.)
3. Water requirement of different Agronomic crops.
4. Morphological description of kharif season crops.

5. Study the effect of seed size on germination and seedling vigor of kharif season crops
6. Role of plant nutrients in crop production, Importance of manures and fertilizers and its classification.
7. Initiatives taken by the central and state governments, NGOs and other organizations for promotion of organic agriculture in India.
8. Green manures- bio fertilizers – types, methods of application – benefits and limitations.

Semester II

Practical

1. Visit to organic farm to study the various components, identification and utilization of organic products.
2. Identification of different types of weeds
3. Vermicompost preparation
4. Preparation of neem products and other botanicals for pest and disease control
5. Economic analysis of organic production system

Suggested Books

1. Arun K. Sharma. 2002. A Hand book of organic farming. Agrobios, India.
2. Balasubramanian, R., Balakrishnan, K and Siva Subramanian, K. 2013. Principles and practices of organic farming. Satish Serial Publishing House.
3. Tarafdar, J.C., Tripathi, K.P and Mahesh Kumar, 2009. Organic agriculture. Scientific Publishers, India.

Semester III

Practical

1. Preparation of papaya candy, amla candy
2. Study of quality parameters of organic produce

3. Soil analysis: pH determination
4. Identification of different types of fertilizers including biofertilizers
5. Preparation of Neem kernel powder
6. Practicing and experiencing in Farmer's Fields.