

Date: 26.07.2024

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**NOTICE**

This is to inform all concerned that the Department of Horticulture is offering the following 01 Optional paper. Any one of these can be opted by any student of the university under the Choice Based Credit System (CBCS) being followed by the university. The details of paper is as under:

| Sl. No.          | Paper Code | Paper Name  | Semester | No. of Credits |
|------------------|------------|---|----------|----------------|
| <b>PG Course</b> |            |   |          |                |
| 1                | HORT-513   | Organic farming for sustainable agricultural production | I        | 4 Cr (3 + 1)   |

For further details regarding Time-Table kindly see the notice board of the Department. For more details please contact for the course of HORT-513 (Dr. Rubee Lata, Assistant Professor, Department of Horticulture, SAST, BBAU, Lucknow).

*Deepti*  
Head 26/7/24

**Department of Horticulture**

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- 1) The AR to V.C., BBAU, Lucknow
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- 6) All Heads/Coordinators/Dean with a request to give it a wide publicity among the stakeholders.
- 7) Notice Board of the Department.
- 8) I/c University Website for its uploading on University website.
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**Department of Horticulture**

# HORT-513: ORGANIC FARMING FOR SUSTAINABLE AGRICULTURAL PRODUCTION 4 Cr.

## THEORY:

**Unit-I:** Organic Farming: Concepts and principles of organic farming

**Unit-II:** Key indicators of sustainable agriculture, organic farming and climate change

**Unit-III:** Input management; compost production, vermicomposting, Compost quality, Compost utilization and marketing

**Unit-IV:** Organic crop management: field crops, horticulture and plantation crops

**Unit-V:** Plant protection measures, biopesticides, natural predators, cultural practice

**Unit-VI:** Rotation design for organic system, Transition to organic agriculture, farming system

**Unit-VII:** Quality analysis of organic foods, Antioxidants and their natural source, organic food and human health

**Unit-VIII :** Standards of organic food and marketing

## PRACTICAL:

Features of organics orchards, working out conversion plan, Input analysis- manures, nutrient status assessment of manures, bio-composting, Biofertilizers and their application, panchagavya preparation and other organic nutrients application, methods of preparation of neem products and application, BD preparation and their role, EM technology and products, biological/natural control of pests and diseases, soil solarisation, frame work for GAP, case studies, HACCP analysis, residue analysis in organic products, documentation for certification, visit to fields cultivated under organic practices.

## Suggested Readings:

Claude, A., Vandana, S., Sultana, I., Vijaya, L., Korah, M. and Bernard, D., 2000. *The Organic Farming Reader*. Other Indian Press, Goa.

Gaur, A.C., Neblakantan, S. and Dargan, K.S., 1984. *Organic Manures*. ICAR.

Lampkin, N. and Ipswich. 1990. *Organic Farming*. Farming Press. London.

Lampkin, N.H. and Padel, S., 1992. *The Economic of Organic Farming-An International Perspective*. CABI.

Palaniappan and Annadural. 2008. *Organic Farming-Theory and Practise*. Scientific Publ.

Peter, K.V., 2008 (Ed.). *Basis of Horticulture*. New Indian Publ. Agency. New. Delhi.

Rao, S. 1977. *Soil Microorganism and Plant Growth*. Oxford and IBH.