

Shiksha Mandal's
Bajaj College of Science, Wardha (Autonomous)
Department of Biotechnology
B.Sc. Semester- II
Generic Elective Course (GE/OE)
INDIAN FARMING SYSTEM
[30 Hrs- 2 Credit]

Indian Farming systems syllabus focus on human and natural resource management strategies and farm designed to achieve both economic viability and sustainable development in rural area. The syllabus is designed to improve student's skills, knowledge, and resources.

Course Objective:

1. To get knowledge reading various agriculture system used by Indian farmers
2. To understand impact of agriculture on common population.
3. To get knowledge about advance technologies used in farming.

Course Outcomes:

1. Student will be able to develop integrated farming system.
2. Students will be able to develop new strategies for improvement in farming.

Sr. No.	Unit Number	INDIAN FARMING SYSTEM (GE/OE) Course Code: UBTG121	Time in Hrs.
1	I	Farming system:- Concept, Organic farming, Dairy farming, Poultry, Duck and quails farming, Fish farming, Silkworm farming, Hydroponic and Aquaponics, Multiple farming system. Contribution of farming in Indian economy, Major crops in India.	12
2	II	Indian green and white revolution, Sustainable farming-problems and its impact on agriculture, Application of Biotechnology in pests, Diseases and weed management in farming, Other important Biotechnological products in farming.	8
3	III	Plant Breeding and Genetics and its impact on farming. MAS (Marker assisted Selection) in crop breeding. Devolvement of high yielding verities, Disease resistance crop verities, Insect pest resistance verities, and Herbicide resistances verities.	10

3. Student will able to apply advance knowledge in traditional farming system.

References:-

- 1) Krishna, K. L., and Uma Kapila (2009). Readings in Indian Agriculture and Industry. Darya Ganj, New Delhi: Academic Foundation. ISBN 8171887384.
- 2) Aggarwal, P. K. (2008). "Global Climate Change and Indian Agriculture: Impacts, Adaptation, and Mitigation" .Indian Journal of Agricultural Sciences. 10: 911–19.
- 3) Ranjan, Rajiv, and V. P. Upadhyay. "Ecological Problems Due to Shifting Cultivation." ias.ac.in.
- 4) Gulati, Ashok, P. K. Joshi, and Maurice Landes (2003). "Contract Farming in India: An Introduction." ncap.res.in.
- 5) Ramesh, P., N. R. Panwar, A. B. Sing, S. Ramana, Sushil Kumar Yadav, Rahul Shrivastava, and A. Subba Rao. "Status of Organic Farming in India." www.ias.ac.in.