

INSTITUTE	FACULTY OF AGRICULTURE
PROGRAM	BACHELOR OF SCIENCE (Hons.) AGRICULTURE
SEMESTER	4
COURSE TITLE	CROP PRODUCTION TECHNOLOGY-II (RABI CROPS)
COURSE CODE	16AS0401
COURSE CREDITS	2

Objective:

- 1 To develop crop production skills among students and provide the profound knowledge of package and practices of many crops.

Course Outcomes: After completion of this course, student will be able to:

- 1 Students will be able to understand crop husbandry of different rabi crops.
- 2 Students will be able to identify good agricultural practices of rabi field crops.
- 3 Students will be able to illustrate scientific approaches towards the management of different field crops.
- 4 Students will be able to employ the distribution of the crops in different parts of country.
- 5 students will be able to identify new farming technologies that applicable for Rabi season crop production.

Pre-requisite of course:To study the production technology of Rabi season crops.

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
1	0	2	50	30	20	25	25

Contents : Unit	Topics	Contact Hours
1	1 Origin, geographical distribution, economic importance, soil and climatic requirements, varieties, cultural practices and yield of Rabi crops	1
2	2 Cereals: Wheat and Barley	1
3	3 Pulses: Chickpea and Peas	1
4	4 Oilseed: Rapeseed, Mustard	1
5	5 Oilseed: Linseed and Sunflower	1

Contents : Unit	Topics	Contact Hours
6	6 Sugar crops: Sugarcane and Sugar beet	1
7	7 Medicinal and Aromatic crops: Mentha (mint), Lemon grass, Isabgul and Citronella	1
8	8 Forage crops: Oat, Lucerne and Berseem	1
9	9 Spice crops: Coriander, Fennel, Dill seed	1
10	10 Spice crops: Ajwain, Fenugreek and Cumin	1
11	11 Commercial crop: Chicory	1
Total Hours		11

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	1 Identification of crops and seed	2
2	2 Sowing methods of wheat and sugarcane	2
3	3 Seed treatment of different rabi crops	2
4	4 Effect of sowing depth and methods on germination crops	2
5	5 Study of growth and yield contributing characters	2
6	6 Visit to the agronomic and forage experiments	2
7	7 Numerical exercises on fertilizer, seed requirement, plant population and seed index	2
8	8 Judging the maturity and harvesting techniques	2
9	9 To work out the cost of cultivation	2
Total Hours		18

Textbook :

1 NA, NA, NA, NA

References:

- 1 Principles and Practices of Agronomy, Principles and Practices of Agronomy, P. Balasubramaniam, and S. P. Palaniappan, Agrobios (India), 2001
- 2 Principles of Agronomy, Principles of Agronomy, S. R. Reddy, Kalyani Publishers, New Delhi, 2002
- 3 Text book of Field Crops Production, Text book of Field Crops Production, R. Prasad, ICAR, New Delhi, 2006

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking
25.00	25.00	20.00	10.00	10.00	10.00

Instructional Method:

- 1 The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board may also use any of tools such as demonstration, role play, quiz, brainstorming, MOOCs etc.
- 2 The internal evaluation will be done on the basis of continuous evaluation of students in the class-room.
- 3 Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory.
- 4 Students will use supplementary resources such as online videos, NPTEL videos, e-courses, Virtual Laboratory.