

INSTITUTE	FACULTY OF AGRICULTURE
PROGRAM	BACHELOR OF SCIENCE (Hons.) AGRICULTURE
SEMESTER	2
COURSE TITLE	PRODUCTION TECHNOLOGY FOR FRUIT AND PLANTATION CROPS
COURSE CODE	16AS0208
COURSE CREDITS	2

Objective:

- 1 To impart the knowledge on economic importance and scope of fruits and plantation crops in India.
- 2 To impart the knowledge on production technology and cultivation methods of fruits and plantation crops.

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

- 1 Students will be able to know define importance and scope of fruit and plantation crop industry in India, concepts of production for fruit and plantation crops, new planting system and methods, soil and climatic requirement of different fruit and plantation crops, etc.
- 2 Students will understand various concepts of high density planting, new techniques of high density planting, plant propagation, seed propagation, etc.
- 3 Demonstrate preparation and application of plant growth regulators to the crops, etc. Investigate the various problems with the production technology of fruit and plantation crops such as disorder, diseases and pests, etc
- 4 To distinguish different fruits and plantation crops, symptoms of disorders, diseases, insects and pests, etc.

Pre-requisite of course: To create the awareness among the students about importance of fruit as well as plantation crops in India

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	Importance and scope of fruit and plantation crop industry in India Importance and scope of fruit and plantation crop industry in India	1
2	High density planting High density planting	1

Contents : Unit	Topics	Contact Hours
3	Use of rootstocks Use of rootstocks	1
4	Production technologies for the cultivation o major fruits- Mango Production technologies for the cultivation o major fruits- Mango	1
5	Banana Banana	1
6	Citrus Citrus	1
7	Grape Grape	1
8	Guava Guava	1
9	Papaya Papaya	1
10	Apple Apple	1
11	Pomegranate, sapota and custard apple Pomegranate, sapota and custard apple	1
12	Minor fruits: Jackfruit, strawberry Minor fruits: Jackfruit, strawberry	1
13	Pineapple, ber and jamun Pineapple, ber and jamun	1
14	Plantation crops- Major- Coconut, arecanut& cashew Plantation crops- Major- Coconut, arecanut& cashew	1
15	Minor- tea, coffee and rubber Minor- tea, coffee and rubber	1
Total Hours		15

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	Description and identification of important varieties of fruit and plantation crops Description and identification of important varieties of fruit and plantation crops	2
2	Seed propagation Seed propagation	2
3	Scarification and stratification of seeds Scarification and stratification of seeds	2
4	Propagation methods for fruit and plantation crops including Micro-propagation Propagation methods for fruit and plantation crops including Micro- propagation	2

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
5	Description and identification of fruit Description and identification of fruit	2
6	Preparation of plant bio regulators and their uses Preparation of plant bio regulators and their uses	2
7	Physiological disorders of fruit and plantation crops Physiological disorders of fruit and plantation crops	2
8	Visit to commercial orchard Visit to commercial orchard	2
Total Hours		16

Textbook :

- 1 NA, NA, NA, NA

References:

- 1 Fruit Part I and II, Fruit Part I and II, Bose, T. K., Astral Publication, 2015

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					
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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.