

Syllabus for B.Sc. (Hons) Agriculture Year – II (Sem. III)

Subject Code: 16AS1301

Subject Short Name: Agron. 3.3

Subject Name: Crop Production Technology-I (*Kharif* crops)

Objective:

1. To impart basic and fundamental knowledge on principles and practices of kharif crop production
2. To impart knowledge and skill on scientific crop production and management

Credits Earned: 3 Credits (1+2)

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

- Students will be able to identify different kharif season crop of India
- Students will be able to acquire knowledge about different cereal, pulses, fiber, and grasses crop.
- Students will be able to know about package of practices of different kharif crops.
- Student will able to calculate cost of cultivation of monsoon season agriculture field crop.

Teaching Scheme (Hours)			Credits	Theory Marks			Tutorial/ Practical Marks		Total Marks
Theory	Tutorial	Practical		ESE (E)	Mid Sem (M)	Progressive Assessment (PA)	Viva (V)	Term work (TW)	
1	0	4	3	40	20	20	10	10	100

Theory Content:

Unit	Topics	Contact Hours
1	Origin, geographical distribution, economic importance, soil and climatic requirements, varieties, cultural practices and yield of Kharif crops	2
2	Cereals- rice, maize, sorghum, pearl millet, finger millet and other minor millets	4
3	Pulses- pigeonpea, mungbean and urdbean	2

4	Oilseeds: Groundnut, Castor, Sesame and Soybean	3
5	Fibre crops- cotton and jute	2
6	Forage crops- sorghum, cowpea, cluster bean, maize, guinea and napier	2
	Total	15

Practical Content:

Unit	Topics	Contact Hours
1	Rice nursery preparation and transplanting of rice	4
2	Sowing of soybean, pigeon pea, mungbean, maize, groundnut and cotton	4
3	Effect of seed size on germination and seedling vigour of <i>Kharif</i> crops	2
4	Effect of sowing depth on germination of <i>Kharif</i> crops	2
5	Identification of weeds in <i>Kharif</i> crops	4
6	Top dressing and foliar feeding of nutrients	2
7	Study of yield contributing characters and yield calculation of <i>Kharif</i> crops	4
8	Study of crop varieties and important agronomic experiments at experiential farm	4
9	Recording biometric observations	2
10	Study of forage experiments	2
11	Morphological description of <i>Kharif</i> crops	4
12	Silage and hay making	2
13	Visit to research centers of related crops	4
	Total	40

Reference Books:

- B. Gurarajan, R. Balasubramanian and V. Swaminathan. Recent Strategies on Crop Production. Kalyani Publishers, New Delhi.
- Chidda Singh.1997. Modern techniques of raising field crops. Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.

- Rajendra Prasad. Textbook of Field Crops Production - Commercial Crops. Volume II ICAR Publication.
- S.R. Reddy. 2009. Agronomy of Field Crops. Kalyani Publishers, New Delhi.

Suggested Theory distribution:

The suggested theory distribution as per Bloom’s taxonomy is as per 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	Understand	Apply	Analyze	Evaluate	Create
25%	25%	20%	10%	10%	10%

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 white board may also use any of tools such as demonstration, role play, quiz, brain storming, MOOCs etc.
2. The internal evaluation will be done on the basis of continuous evaluation of students in the class-rooms.
3. Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory/ field.
4. Students will use supplementary resources such as online videos, NPTEL videos, e-courses, Virtual Laboratory.