

# Syllabus for Bachelor of Agriculture

## AGRONOMY

Subject code: 16AS0201

Subject Name: **Fundamentals of Agronomy**

B. Sc. (Hons.) Agri., **First Year (Sem. - II)**

### Objective:

To provide the complete knowledge of different principles of crop production.

**Credit Earned:** 3+1= 4 Credit

### Course Outcomes:

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

1. Adopt the proper package of practices for a particular crop to obtain higher yield.
2. To follow the proper crop rotation, mixed cropping, relay cropping and other relevant practices for maximization of crop production.

### Teaching and Evaluation Scheme

Teaching Scheme (hours)		Credits	Theory Marks			Practical Marks		Total Marks
Theory	Practical		ESE (E)	IA	CSE	Viva (V)	Term Work (TW)	
3	2	4	50	30	20	25	25	150

# Syllabus for Bachelor of Agriculture

## AGRONOMY

### Contents:

Unit	Topics	Contact Hours
<b>Theory</b>		
1.	Agronomy and its scope	
2.	Seeds and sowing	
3.	Tillage and tilth	
4.	Crop density and geometry	
5.	Crop nutrition, manures and fertilizers and nutrient use efficiency	
6.	Crop rotation and its principles, adaptation and distribution of crops	
7	Harvesting and threshing of crops	
8	Weeds- importance, classification, crop-weed competition, concept of weed management, principles and methods.	
9	Herbicide – classification, selectivity and resistant, allelopathy	

Unit	Topics	Contact Hours
<b>Practical</b>		
1.	Identification of crops, seeds, fertilizers, pesticides and tillage implements	
2.	Study of agro-climatic zones of India	
3.	Identification of weeds in crops, methods of herbicides and fertilizer application	
4.	Study of yield contributing characters and yield estimation,	
5.	Seed germination and viability test	
6.	Numerical exercises on fertilizer requirement, plant population and herbicides	
7	Use of tillage implements-reversible plough, one way plough, harrow, leveler and seed drill	

## **Reference Books:**

1. Fundamentals of Agronomy and Agro meteorology  
Reddy S. R. and Reddy A. P. K.  
1<sup>st</sup> edi, 2016, Kalyani Publishers Pvt. Ltd., New Delhi
2. Principles of Agronomy  
Reddy T. Yellamanda and Reddy G. H. Sankara  
5<sup>th</sup> edi., 2016, Kalyani Publishers Pvt. Ltd., New Delhi
3. Elements of Agronomy  
Reddy S. R., 1<sup>st</sup> edi. 2016, Kalyani Publishers Pvt. Ltd., New Delhi
4. Numerical Agronomy  
Sharma Abhijit, Reprint 2016, Kalyani Publishers Pvt. Ltd., New Delhi

## **Instructional Method:**

- a. 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.*
- b. The internal evaluation will be done on the basis of continuous evaluation of students in the class-rooms
- c. Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory
- d. Students will use supplementary resources such as online videos, NPTEL videos, e-courses, Virtual Laboratory.