

<b>INSTITUTE</b>	<b>FACULTY OF AGRICULTURE</b>
<b>PROGRAM</b>	<b>BACHELOR OF SCIENCE (Hons.) AGRICULTURE</b>
<b>SEMESTER</b>	<b>5</b>
<b>COURSE TITLE</b>	<b>FARMING SYSTEM AND SUSTAINABLE AGRICULTURE</b>
<b>COURSE CODE</b>	<b>16AS0501</b>
<b>COURSE CREDITS</b>	<b>1</b>

**Objective:**

- 1 To provide complete knowledge of basic principles of different farming system.
- 2 To enable students with the intense knowledge of sustainable production system without damaging environment.

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

- 1 Students will be able to describe different farming system approaches.
- 2 Students will be able to define sustainable agriculture goals and conservation agriculture strategies.
- 3 Students will be able evaluate the current farming system in India.
- 4 Students will be able to classify different farming system and models.

**Pre-requisite of course:** To aware students to develop sustainable agriculture for the better future world.

**Teaching and Examination Scheme**

<b>Theory Hours</b>	<b>Tutorial Hours</b>	<b>Practical Hours</b>	<b>ESE</b>	<b>IA</b>	<b>CSE</b>	<b>Viva</b>	<b>Term Work</b>
1	0	0	50	30	20	0	0

<b>Contents : Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
1	<b>1</b> Farming System-scope, importance, concept and effects of modern agriculture System, Systems approach	2
2	<b>2</b> Farming system, Farming systems concept, Principles of farming system, Characteristics and objective of farming system	1
3	<b>3</b> Farming system components and their maintenance	2
4	<b>4</b> Cropping system and pattern, multiple cropping system	2
5	<b>5</b> Allied enterprises and their importance	2

<b>Contents : Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
6	<b>6</b> Tools for determining production and efficiencies in cropping and farming system	1
7	<b>7</b> Conservation agriculture strategies in agriculture HEIA and LEISA and its techniques for sustainability, Integrated farming system-historical background, objectives and characteristics	2
8	<b>8</b> Components of IFS and its advantages	1
9	<b>9</b> Site specific development of IFS model for different agro-climatic zones	2
<b>Total Hours</b>		<b>15</b>

#### **Textbook :**

- 1 NA, NA, NA, NA

#### **References:**

- 1 Farming system, principles & practices, Farming system, principles & practices, C. Jayanthi & P. Devasenapathy, Hardbound, 2019
- 2 Farming system & sustainable agriculture, Farming system & sustainable agriculture, S. R. Reddy, Kalyani, 2018
- 3 Farming system & sustainable agriculture, Farming system & sustainable agriculture, S. S. Walia & U. S. Walia, Scientific publisher, 2020

#### **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					
<b>Remember / Knowledge</b>	<b>Understand</b>	<b>Apply</b>	<b>Analyze</b>	<b>Evaluate</b>	<b>Higher order Thinking</b>
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 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 Students will use supplementary resources such as online videos, NPTEL videos, e-courses, Virtual Laboratory.

