Name of Faculty		**Agriculture**						**L:1 T:1**
Name of Course		**B.Sc. (Hons.) Agriculture**						**Credits: 2**
Subject/Paper		**Sustainable Approaches in Agriculture**	**Semester**	**II**	**Paper Code**	ASC-2		**Marks: 50**
Course Objectives:		At the completion of this course each student will be able to meet the following student learning objectives: 1. To learn about the present status of sustainability in agriculture in India 2. To learn sustainable approaches in agriculture 3. To understand the role of climate in studying the organic farming system 4. Impact of organic farming system on food quality This course imparts transferable skills about organic farming, its practice and its effect on food quality required for an agricultural expert as well as an interested general individual as a hobby practice.						
Course Coordinator **Name:** **Contact:**		**Dr. Vinita Rajput** **09468111162**	**Class Time: 2:00-4:00 pm.**		**Day**	**Wednesday**		**2:00-4:00 PM**
Unit	**Sub Units**	**Time (hrs)**	**Topic**	**Teaching Methodology**		**Assessment Method**		**Teaching Faculty**
Unit-I	**1.1**	2	Agriculture and its definition, scope and development of agriculture	Student Interactive Session Student Seminar		Single Response Answer Multiple Response Answer Assertion – Reasoning On Spot Group Discussion Long Answer Short Answer Problem Based		**Dr. Mohinder Singh**
	1.2	2	Agronomy definition, scope					**Dr. Mohinder Singh**

	1.3	2	Principles of agronomy		Question Interpretation Question	**Dr. Mohinder Singh**
	1.4	2	Role of agriculturist in sustainable agriculture and organic farming			**Dr. Mohinder Singh**
Unit-II	2.1	2	Definition and scope of organic agriculture	Student Interactive Session Students Seminar	Single Response Answer Multiple Response Answer Assertion – Reasoning On Spot Group Discussion Long Answer Short Answer Problem Based Question Interpretation Question	**Dr. Mohinder Singh** **Dr. Mohinder Singh** **Dr. Mohinder Singh** **Dr. Mohinder Singh**
	2.2	2	Principles and practices of organic agriculture, current status in India			
	2.3	3	Components of organic agriculture: crop and soil management			
	2.4	4	On farm waste recycling, energy use, food quality, sustainable agriculture, future challenges: natural			

			resource management.			
Unit-III	3.1 3.2 3.3 3.4	4 3 3 3	Climate: role of weather elements: solar radiation, temperature, wind, humidity, rainfall and precipitation Season of occurrence, intensity, amount and distribution, effective rainfall Weather forecasting; types; green house effect Climate change: impact, adaptation, etc.	Student Interactive Session Student Seminar	Single Response Answer Multiple Response Answer Assertion – Reasoning On Spot Group Discussion Long Answer Short Answer Problem Based Question Interpretation Question	**Dr. Mohinder Singh** **Dr. Mohinder Singh** **Dr. Mohinder Singh** **Dr. Mohinder Singh**

Assessment: 50 Marks (10 marks Internal – 40 End Term)

Recommended Books:

1. ICAR, New Delhi (2013). Hand Book of Agriculture, 5th reprint of sixth edition.
2. Randhawa, M.S. (1982). A History of Agriculture in India. Vol. II, ICAR, New Delhi
3. Randhawa, M.S. (1983). A History of Agriculture in India. Vol. III, ICAR, New Delhi
4. Randhawa, M.S. (1986). A History of Agriculture in India. Vol. IV, ICAR, New Delhi.
5. Reddy, S.R. (2000). Principles of Crop Production (1st edition.
6. Reddy, T. Yellamanda and Reddy, G. H. Sankara (2005). Principles of Agronomy (3rd revised edition)
7. Singh, C. M., Sud, V.K., Suri, S.M. and Singh, J. (2000). Women in Agriculture - Training Manual.
8. Singh, J. and Tesfamichael, A. (2007). Principles of Crop Production -Teaching Manual.