					68		
Title of o	course- SUSTAINABLE AGRICULTURE	AND ORG	SANIC FAR	MING			
Nodal De	partment of HEI to run course						
Broad Ar	Broad Area/Sector-			Agriculture Economics			
Sub Secto	or-						
Nature of	Nature of course - Independent / Progressive			Independent			
Name of	suggestive Sector Skill Council		Humanities /	Social Science	e		
Aliened N	ISQF level						
Expected	fees of the course -Free/Paid						
Stipend to	student expected from industry						
Number o	of Seats						
Course Code			Credits- 03 (Credits- 03 (1 Theory, 2 Practical)			
Max Mar	ks100 Minimum Marks						
Name of	proposed skill Partner (Please specify, Name of inde	ustry, compar	у				
etc for Pr	actical /training/ internship/OJT						
Job prospects-Expected Fields of Occupation where student will be able to			o o Agı	Agricultural Research Technician			
get job after completing this course in (Please specify name/type of industry,			 Sustainability Coordinator 				
company etc.)				Farm manager			
				Agricultural Entrepreneur			
				Organic Handler			
		_					
				Organic Certifying Agent			
			• Org	ganic Restaurat	eur		
Syllabus	3						
		General/	Theory/	No of the	eory No of skill		
Unit	Topics	Skill	Practical/ OJT/	hours	Hours		
	Topics	component	Internship/	(Total-15	(Total-60		

Unit	Topics	General/ Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total-15 Hours=1 credit)	No of skill Hours (Total-60 Hours=2 credits)
I	 Importance of agriculture in India Food security Sustainable agriculture Various forms of agriculture - Commercial, Extensive and Intensive, Rainfed, Irrigated, etc. Practical		Theory	05	20
	 Farm visits Interaction with farm experts To familiarize with cultivation aspects of sustainable agriculture Identification of different crops Different methods of sowing : direct seeding, broadcasting, dibbling and drilling transplantation 		Practical		
П	 Classification of crops Soil and climatic requirements for different crops Fertilizers and fertilizer use - management of fertilizers Biological nitrogen fixation Irrigation: Definition and objectives Role of water in soil and plants 		Theory	05	20
	• Farm Visits				

	T.1 ('C' (' C ' '		1	1	
	• Identification of manures - organic manures : bulky and concentrated manures.				
	Fertilizers: Identification and preparation of				
	straight, complex and mixed fertilizers				
	Fertilizer recommendation and		Practical		
	calculation for major crops				
	Yield estimation of crops - biological				
	yield and economical yield				
III	Importance and scope of organic farming		Theory	05	20
	• Components and methods of organic farming				
	Organic manures and methods of				
	organic manure production				
	 Certification process and standards of 				
	organic farming				
	Practical				
	• Farm visits				
	• Visit to organic farms to study				
	cultivation of organic crops		Practical		
	To learn about commercial aspect of				
	organic farming				
	• Familiarization of green manure crops				
	and cover crops				
	 Preparation of vermi-compost and their methods 				
	Study and field application of bio- fertilizers				
	Plant protection through bio-agents				
	and traps				
	··r				
IV	-	-	-	-	-
V	-	-	-	-	-
VI	-	-	-	-	-

Suggested Readings:

- 1. Havlin, J.L., Beaton, J.D., and others. 2006. *Soil Fertility and Fertilizers : An introduction to Nutrient Management* (7 ed.), Pearson Education, ICAR 2006.
- 2. *Handbook of Agriculture*. ICAR. New Delhi. De, G.C. 1989.
- 3. Balasubramaniyan, P and Palaniappan, S.P. 2001. *Principles and Practices of Agronomy*. AgroBios (India) Ltd. Jodhpur.
- 4. De, G.C. 1989. Fundamentals of Agronomy. Oxford & IBH Publishing Co., New Delhi.
- 5. Noor Mohammed. 1992. Origin, diffusion and development of agriculture. In: Noor Mohammed (ed.), *New Dimensions in agricultural geography: Vol.I Historical Dimensions of agriculture*. Concept publishing Co., New Delhi.

Suggested Digital platforms/ web links for reading- NA

Suggested OJT/ Internship/ Training/ Skill partner -

Suggested Continuous Evaluation Methods: Theory, MCQs, Practical, Project, Viva voce

Course Pre-requisites:

• No pre-requisite required, open to all

- To study this course, a student must have the subject Economics in class/12th/ certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series.

Suggested equivalent online courses:

Any remarks/ suggestions:

Notes:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but students will get only 3credit/ semester or 6credits/ year
- Credits for Theory =01 (Teaching Hours = 15)
- Credits for Internship/OJT/Training/Practical = 02 (Training Hours = 60)