JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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Lesson Plan & Tracking

Programe : B.Sc.(Hons.)Agriculture	Session :	Year : 2022	Sem: V
Course: Manures, Fertilizers and Soil Fertility Management (Theory)			
Name of the Faculty: Puja Singh	Commencement Date:		Date of Closure:

Lecture No.	Week	Unit	Topics to be Covered	Blended Mode			Date	Duration	Tracking of Lectures	Related Course Outcome	Signature of Faculty	Signature of HoD	Remarks (if any)
				ICT Tool/Platform/ LMS	Resources	Activity							
1	1	I	Introduction and importance of organic manures										
2	1		properties and methods of preparation of bulky and concentrated manures.										
3	2		Green/leaf manuring.										
4	2		Fertilizer recommendation approaches.										
5	3		Integrated nutrient management.										
6	3	II	Chemical fertilizers: classification,										
7	4		composition and properties of major nitrogenous,										
8	4		composition and properties of major phosphaticfertilizers,										
9	5		composition and properties of major potassic fertilizer										

10	5		secondary & micronutrient fertilizers,										
11	6		Complex fertilizers, nano fertilizers										
12	6		Soil amendments,										
13	7		Fertilizer Storage, Fertilizer Control Order.										
14	7	III	History of soil fertility and plant nutrition.										
15	8		criteria of essentiality. role, deficiency and toxicity symptoms of essential plant nutrients,										
16	8		Mechanisms of nutrient transport to plants,										
17	9		factors affecting nutrient availability to plants.										
18	9		Chemistry of soil nitrogen, phosphorus, potassium,										
19	10		Chemistry of calcium, magnesium, sulphur										
20	10		Chemistry of micronutrients.										
21	11		Soil fertility evaluation, Soil testing. Critical levels of different nutrients in soil.										

22	11	IV	Forms of nutrients in soil, plant analysis, rapid plant tissue tests. Indicator plants.											
23	12		Methods of fertilizer recommendations to crops. Factor influencing nutrient use efficiency (NUE)											
24	12		methods of application under rainfed and irrigated conditions											