JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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Lesson Plan & Tracking

Programe : B.Sc.(Hons.)Agriculture	**Session :**	**Year : 2022**	**Sem: I**
Course: Introduction to Soil Science (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	Soil as a natural body,										
2	1		Pedological and edaphological concepts of soil;										
3	2		Soil genesis: soil forming rocks and minerals;										
4	2		weathering, processes and factors of soil formation;										
5	3		Soil Profile, components of soil										
6	3	II	Soil physical properties: soil-texture, structure,										
7	4		density and porosity, soil colour, consistence and plasticity;										
8	4		Elementary knowledge of soil taxonomy classification ;										
9	5		Soils of India										
10	5		Soil water retention, movement and availability;										

11	6		Soil air, composition, gaseous exchange, problem and plant growth,										
12	6		Soil temperature; source, amount and flow of heat in soil;										
13	7		Effect of soi temprature on plant growth										
14	7	III	Soil reaction-pH, soil acidity and alkalinity, buffering,										
15	8		effect of pH on nutrient availability;										
16	8		soil colloids - inorganic and organic										
17	9		silicate clays: constitution and properties;										
18	9		sources of charge; ion exchange, cation exchange capacity, base saturation;										
19	10		Soil organic matter: composition, properties and its influence on soil properties;										
20	10		Humic substances - nature and properties;										
21	11		Soil organisms: macro and micro organisms,										

22	11	IV	Soil organisms::their beneficial and harmful effects;										
23	12		Soil pollution - behaviour of pesticides and inorganic contaminants,										
24	12		Prevention and mitigation of soil pollution										