JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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Lesson Plan & Tracking

Programe : B.Tech. I	**Session : 2022-2023**	**Year : Ist**	**Sem: Ist**
Course: Physics I			
Name of the Faculty: Dr. Shraddha Prasad	**Commencement Date: 19.09.2022**		**Date of Closure:30/12/2022**

Lecture No.	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	Introduction-Electrostatic										
2	1	Laplace's equations for electrostatic potential										
3	1	Poisson's equations for electrostatic potential										
4	1	Boundary conditions of electric field and electrostatic Potential										
5	1	Types of Dielectric										
6	1	Energy of a charge distribution and its expression in terms of electric field.										
7	1	Bio-Savart law										
8	1	Magnetization										
9	1	Diamagnetic, Parmagnetic and Ferromagnetic matarial										
10	1	Magnetic Flux										
11	1	Faraday's law										
12	1	Lenz's law.										
13	1	Displacement current										

14	1	Maxwell's equations.										
15	2	Introduction to Quantum mechanics										
16	2	Wave nature of Particles										
17	2	Uncertainty principle										
18	2	Time-dependent Schrodinger equation										
19	2	Particle in a box										
20	2	Particle in three dimensional box.										
21	2	Energy Level of Particle enclosed in one dimensional potential box of infinite height										
22	2	Revision- Numerical										
23	3	Introduction to Mechanics-Scalars and vectors Forces in Nature										
24	3	Newton's equations of motion in polar coordinates										
25	3	Angular momentum										
26	3	Euler's laws of motion										
27	3	Necessity of Euler's laws of motion in describing rigid body motion; Examples.										
28	3	Revision- Numerical										
29	4	Brewster's Law										
30	4	Total internal reflection,										
31	4	Laser										
32	4	Types of Laser										
33	4	Revision- Numerical										
34	5	P-N junction, Metal-semiconductor junction										

35	5	Types of semiconductor photodetectors -p-n junction										
36	5	LED										
37	5	Application of LED										
38	5	PIN and Avalanche										
39	5	Revision										
40	5	Revision										