

LESSON PLAN- B.Sc 1st SEMESTER

Session: 2022-23

Name of teacher- Dr. Naveen Kumari, Assistant Professor

Subject- Physics

CLASS	WEEKS	SYLLABUS
B.Sc 1 st Semester	22-8-2022 to 27-8-2022	Mechanics of a single particle, conservation law of linear and angular momentum
	29-8-2022 to 3-9-2022	Conservation law for Energy of single particle
	5-9-2022 to 10-9-2022	System of particles, centre of mass and its equation of motion.
	12-9-2022 to 17-9-2022	Conservation law of linear and angular momentum and energy of single particle
	19-9-2022 to 24-9-2022	Test of Unit 1 Generalised coordinates, Generalised form of velocity, acceleration
	26-9-2022 to 1-10-2022	Momentum in Generalised Coordinates
	3-10-2022 to 8-10-2022	Force and potential energy in terms of generalised coordinates
	10-10-2022 to 19-10-2022	Test of Unit 2

	<p>27-10-2022 to 5-11-2022</p> <p>7-11-2022 to 12-11-2022</p> <p>14-11-2022 to 19-11-2022</p>	<p>Hamilton's variational principle, Derivation of Lagrange's equation of motion from Hamilton's principle</p> <p>Application of Lagrange's equation of motion : Linear harmonic oscillator, Simple pendulum,</p> <p>Atwood's machine, Numerical related problems,</p>
	<p>21-11-2022 to 26-11-2022</p> <p>28-11-2022 to 3-12-2022</p> <p>5-12-2022 to 10-12-2022</p>	<p>Moment of inertia, Torque, Angular momentum, kinetic energy of rotation, Theorems of perpendicular and parallel axes with proof Numerical problems,</p> <p>M.I of solid sphere, M.I of Hollow sphere, M.I of spherical shell and solid cylinder</p> <p>M.I of hollow cylinder and M.I of solid bar of rectangular cross-section, Acceleration of a body rolling down an inclined plane</p>
	<p>12-12-2022 to 17-12-2022,</p> <p>17-12-2022 onwards</p>	<p>Assignments, Viva, Test, Revision</p> <p>MDU examination</p>