

Lesson Plan January 2023 to April 2023

Name of the Assistant/Associate Professor: Dr Sheetal Chawla
Class and Section: B.Sc. Math Hons. (VI semester)
Subject: MATHEMATICS
Paper: Dynamics
Week 1 Velocity and acceleration along radial and transverse velocity
Week 2 Examples and Exercise related to Velocity and acceleration along radial and transverse velocity
Week 3 Acceleration along tangent and normal directions
Week 4 Relative velocity and acceleration
Week 5 Simple Harmonic motion, Examples and Exercise related to S.H.M.
Week 6 Elastic Strings and Examples and Exercise related to Elastic Strings
Week 7 Mass, Momentum and Force and Examples and Exercise related to Mass, Momentum and Force
Week 8 Newton laws of motion Examples and Exercise
Week 9 Work, Power and Energy Examples and Exercise
Week 10 Definition of Conservative forces Examples and Exercise
Week 11 Impulsive forces, Examples and Exercise

Week 12

Motion on smooth and rough plane curves
Examples and Exercise

Week 13

Projectile motion of a particle in a plane
Examples and Exercise

Week 14

Vector angular velocity , General motion of a rigid body
Examples and Exercise

Week 15

Central Orbits, Kepler's laws of motion
Examples and Exercise

Week 16

Motion of a particle in three dimension, Acceleration in terms of different coordinate
Systems, Examples and Exercise

Week 17

Problem discussion and
assignment submission

Week 18

Revision and class test