#### Session: 2023 - 2024

Name of the Teacher: Dr. MONIA

Class and Section: B.Sc.III(6<sup>th</sup> Sem.)

Subject: Mathematics

**Paper: Dynamics** 

#### JANUARY

Week 3

Chapter: Velocity and acceleration along radial and transverse velocity

Week 4

**Chapter:** Examples and Exercise related to Velocity and acceleration along radial and transverse velocity

Week 5

Chapter: Acceleration along tangent and normal directions, Relative velocity and acceleration

### FEBRUARY

Week 1

Chapter: Simple Harmonic motion, Examples and Exercise related to S.H.M.

Week 2

Chapter: Elastic Strings and Examples and Exercise related to Elastic Strings

Week 3

**Chapter:** Mass, Momentum and Force and Examples and Exercise related to Mass, Momentum and Force

Week 4

Chapter: Newton's laws of motion Examples and Exercise

# MARCH

Week 1

Chapter: Work, Power and Energy Examples and Exercise

Week 2

Chapter: Definition of Conservative forces Examples and Exercise

Assignments:

Week 3

Chapter: Impulsive forces, Examples and Exercise

Week 4

**Chapter:** Motion on smooth and rough plane curves

Week 5

Vacations (Holi)

# APRIL

Week 1

**Chapter:** Projectile motion of a particle in a plane

## Week 2

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

### Week 3

Chapter: Central Orbits, Kepler's laws of motion

Quiz

Week 4

Chapter: Motion of a particle in three-dimension, Acceleration in terms of different coordinate

Week 5

**Chapter: Test**