Part 1: 30 Multiple Choice – 1 Mark Each

- Questions range from quick calculations to concept questions.
- Should take about 45 minutes

Part 2: 12 Work Problems – 5 Marks Each – Below is the main concept of each question.

1. Application of Vectors

2. Application of Vectors

3. Acceleration of Multiple Masses

4. Acceleration of Multiple Masses

5. Forces and Torque

6. Forces and Torque

7. Projectile Motion

8. Projectile Motion

9. Universal Gravitation in 2D

10. Universal Gravitation

11. Universal Gravitation

12. Conservation of Momentum in 2D

- ➢ Vectors
    - o Resultant using perpendicular components
    - o Applications of Vectors
- ➢ Forces
    - o Equilibrant
    - o Forces applied at an angle
    - o Ramp questions
    - o Hanging signs
    - o Multiple masses
- ➢ Torque
    - o Net torque
    - o Force supplied by columns
    - o Tension in wire questions
- ➢ Projectiles
    - o Horizontal launch
    - o Vertical launch
    - o Max height, range, time in air
    - o Finding initial velocity, angle of launch

Required Materials

- Pencils, erasers
- Scientific calculator
- Formula Sheet

Given Materials

- Question booklet
- Answer booklet