Physics Assignment

Subject: Physics

Grade: 9th

Assignment Title: Motion and Laws of Motion

Due Date: 28 July 2025

Total Marks: 20

Instructions:

- Answer all questions in your notebook or submit digitally.

- Diagrams must be labeled properly.

- Show all derivations and calculations.

Questions:

Q1. Define motion. Explain the different types of motion with examples. (3 marks)

Q2. A car accelerates from 5 m/s to 20 m/s in 5 seconds.

   Calculate:

   a) Acceleration

   b) Distance covered (3 marks)

Q3. State Newton's Three Laws of Motion with suitable examples. (6 marks)

Q4. Explain the concept of inertia.

   Give one example each for inertia of rest, motion, and direction. (4 marks)

Q5. Why do passengers fall forward when a moving bus suddenly stops? (2 marks)

Q6. A man throws a ball upwards with an initial velocity of 20 m/s.

   Find the maximum height reached. (g = 9.8 m/s²) (2 marks)

Submission Guidelines:

- Submit only PDF or scanned image formats.

- Ensure your name and class are clearly mentioned.

- Late submissions will be penalized unless prior approval is obtained.