

Question Paper

Topic 1: Mechanics

Q1. A car is moving in a straight line. Draw a velocity-time graph for the motion if the car starts from rest, accelerates uniformly, and then maintains a constant velocity.

Answer: This is a spatial intelligence type question and requires the student to draw the graph accurately to show the initial acceleration followed by constant velocity.

Explanation: The graph should show a straight line with a positive slope representing the acceleration phase, followed by a horizontal line representing the constant velocity phase.