Kurdistan Regional Government Iraq

Ministry of Higher Education & Scientific Research

Salahaddin University –Erbil College of Basic Education Department: General Science



Module: Properties of matter

Stage : First

Round: Midterm Exam

Time : 1 Hour

Date : -04-2024

Midterm Exam - Second Semester (2023-2024)

## Note: Students are allowed to use calculator.

## **Student Name:**

Q1/ A shell was fired from a rifle at a speed of (200 meters/second) at an angle of (40° degrees) with the horizon:

(5 Marks)

- 1- The magnitude of its speed and the direction of the shell position (20 sec) after it was thrown.
- 2- Projectile/shell flight time

Q2/ A worker pushes a loaded sled S whose mass m is (240kg) for a distance d of (2.3m) over the surface of frozen lake. The sled moves with negligible friction on the ice. The worker enters a constant horizontal force F of (130N). If the sled starts from rest, what is its final velocity.

(5 Marks)