

PHYSICS GRADE 10

END TERM 1 EXAMINATION 2026

Time: 2½ Hours

NAME.....ADM NO.....

DATE.....SIGN.....

INSTRUCTIONS TO CANDIDATES

1. Answer ALL questions.
2. Show all working clearly where calculations are required.

1.a) Define the following terms:

i) Physics (2 marks)

ii) Physical quantity (2 marks)

iii) SI units (2 marks)

b) State four branches of physics. (4 marks)

c) State the SI units of the following quantities:

i) Length

ii) Mass

iii) Time

iv) Temperature (5 marks)

2.a) Define the following terms.

i) Distance (2 marks)

ii) Speed (2 marks)

iii) Velocity (2 marks)

b) A car travels a distance of 150 km in 3 hours.

i) Calculate its average speed. (4 marks)

ii) Convert the speed into m/s. (4 marks)

c) State two differences between speed and velocity. (4 marks)

d) Sketch a distance–time graph for uniform motion. (2 marks)

3.a) What is force. (2 marks)

b) State four effects of a force. (4 marks)

c) State Newton's First Law of Motion. (3 marks)

d) A force of 20 N acts on a body of mass 5 kg.

i) Calculate the acceleration produced. (4 marks)

ii) State the formula used. (2 marks)

e) Differentiate between mass and weight. (5 marks)

4.a) Define the term pressure. (2 marks)

b) State the formula for calculating pressure. (2 marks)

c) A force of 200 N acts on an area of 4 m^2 .

Calculate the pressure exerted. (4 marks)

d) State three applications of pressure in everyday life. (3 marks)

e) Explain why sharp knives cut more easily than blunt ones. (4 marks)

5.a) Define energy. (2 marks)

b) State three forms of energy. (3 marks)

c) Define kinetic energy. (2 marks)

d) A body of mass 2 kg moves at a velocity of 5 m/s.

Calculate its kinetic energy. (4 marks)

e) State the law of conservation of energy. (4 marks)

6.a) What is meant by the term heat. (2 marks)

b) State three methods of heat transfer. (3 marks)

c) Explain conduction. (3 marks)

d) State two differences between heat and temperature. (4 marks)

e) State two effects of heat on matter. (3 marks)

END