

# FALL TERM 2023

## GENERAL SCIENCE VIRTUAL ASSESSMENT



## SHOW WHAT YOU KNOW!!!

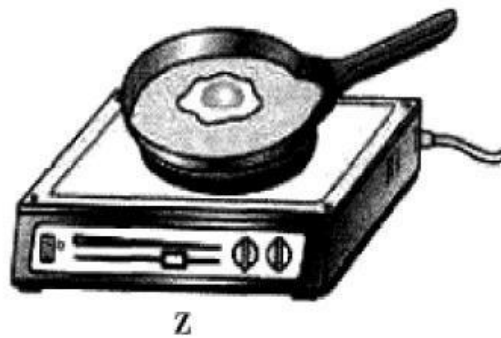
Instructions to Students:

1. Read each question carefully.
2. Answer ALL questions
3. Follow ALL instructions.

TIME ALOTTED: 35 Minutes

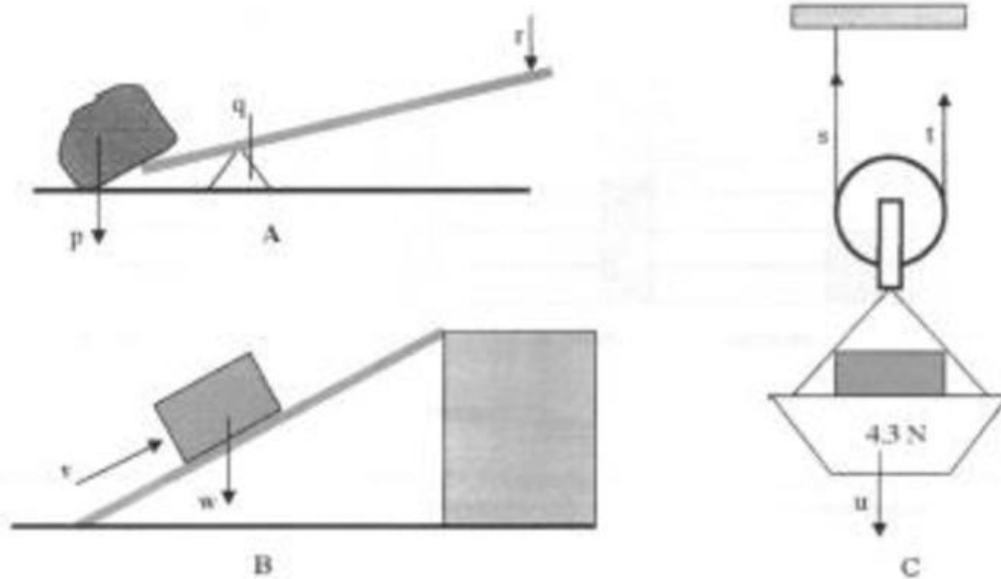
DO YOUR BEST 😊

5. The diagram shows various ways a form of energy can be transmitted.



- (a) (i) Name the form of energy being transmitted. \_\_\_\_\_ [1]
- (ii) Identify the process which transmits energy at X, Y and Z.
- X from the Sun to the girl; \_\_\_\_\_
- Y from the flame to the hand; \_\_\_\_\_
- Z from the hot plate to the pan. \_\_\_\_\_ [3]

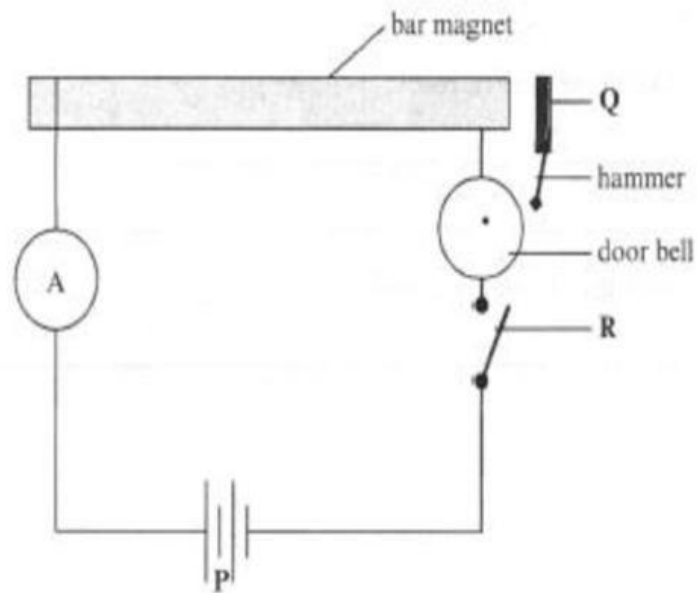
5. The diagrams show **THREE** types of simple machines labelled **A**, **B** and **C**.



- (a) (i) Name the type of simple machine shown in **A** and **B**.
- A** \_\_\_\_\_
- B** \_\_\_\_\_ [2]
- (ii) Give **ONE** example of each of the simple machines named.
- example
- A** \_\_\_\_\_ [1]
- B** \_\_\_\_\_ [1]
- (b) For the type of machine shown in diagram **B**, write the letter which represents the
- (i) effort. \_\_\_\_\_
- (ii) load. \_\_\_\_\_ [2]
- (c) (i) Name the simple machine with a **fulcrum**.
- name \_\_\_\_\_ [1]
- (ii) Identify the letter which represents the fulcrum.
- fulcrum \_\_\_\_\_ [1]
- (d) Diagram **C** shows a single moving pulley. Both strings, **s** and **t**, share the load equally.
- Calculate how much effort will be needed, in each string, to support a load of 4.3 N? (Show working and give answer with the units).

[2]

6. The diagram shows an electrical circuit.



- (a) Identify the parts labelled **P** and **R**.
- (i) **P** \_\_\_\_\_
- (ii) **R** \_\_\_\_\_ [2]
- (b) (i) State what happens to the **bar magnet** when **R** is pressed to close the circuit.  
The **bar magnet** becomes a/an \_\_\_\_\_ [1]
- Q** is a metal.
- (ii) State the name of a possible metal for **Q**.  
\_\_\_\_\_ [1]
- (iii) State what happens to **Q** when **R** is pressed to close the circuit.  
\_\_\_\_\_ [1]
- (iv) State **TWO** things that will happen to the door bell when **R** is pressed to close the circuit.
- 1 \_\_\_\_\_
- 2 \_\_\_\_\_ [2]

(c) The symbol  $\textcircled{A}$  in the circuit, represents an ammeter which measures the **current** in the circuit.

(i) Define the term **current**.

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[2]

(ii) Give the SI unit for current.

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[1]

Total marks [10]