

FORM ONE EXAM

SUBJECT: PHYSICS

Candidate's Name:

SECTION A (15 marks)

Answer **all** questions in this section

1. For each of the items (i) – (x), choose the most correct answer from among the given alternatives and write its letters beside the item number in the spaces provided.

- i) In a physics laboratory, fire may be caused by
 - A. Carelessness in using gas lighter or match box
 - B. Use your bare hands to pick up pieces of broken glass
 - C. Disposing solid waste into the sink
 - D. Using dirty or broken apparatus
- ii) _____ is an instrument used to measure length, depth, internal and external diameters of cylindrical object more accurately
 - A. Meter rule
 - B. Micrometer screw gauge
 - C. Vernier caliper
 - D. Tape measure
- iii) _____ is an instrument / apparatus for measuring **mass** of an object
 - A. Spring balance
 - B. Stop watch
 - C. Triple beam balance
 - D. Calorimeter
- iv) The following are the apparatus for measuring volume of liquids **except**
 - A. Beaker
 - B. Measuring cylinder
 - C. Tripod stand
 - D. Pipette
- v) Which of the following are necessary components for a fire to occur
 - A. Fuel, oxygen and heat
 - B. Oxygen, heat and carbon dioxide
 - C. Fuel, heat and match box
 - D. Chlorine, heat and Bunsen burner
- vi) _____ is substance which should be handled with care to prevent them from breaking. example a glass ware such as beaker, test tube and conical flask.
 - A. flammable
 - B. irritant/Harmful
 - C. fragile
 - D. Oxidant /oxidizing agent
- vii) Physics is a branch of science which deals with the relationship between
 - A. Matter and atom
 - B. Environment and human being
 - C. Matter and energy
 - D. Living things and nonliving things
- viii) Which one among the following is a form of energy?
 - A. Bunsen burner
 - B. X-ray machine
 - C. Electrical
 - D. Kerosine burner
- ix) The following are the two (2) examples of liquid states **except**
 - A. Kerosene and water
 - B. Desk and stone
 - C. Milk and honey
 - D. Blood and spirit

- x) _____ is a class of fire which involves burning of solid materials such as wood, paper or textile
- A. CLASS A
B. CLASS B
C. CLASS C
D. CLASS D

i	ii	iii	iv	v	vi	vii	viii	ix	x

2. The table below gives some of the items found in a first aid kit in **List A** and their uses in **List B** correctly match them

	LIST A		LIST B
i)	Disposable sterile gloves.	A	Protect wounds from dirty and germs.
ii)	Liniment.	B	Relieve pain.
iii)	Antiseptic solution.	C	Cut dressing material.
iv)	Clinical theermometer.	D	Measure body temperature.
v)	Scissors and razor blade.	E	Clean fresh cuts and bruises.
		F	Reduce muscular pain.
		G	Prevent direct contact with victim's body fluids.

LIST A	i	ii	iii	iv	v
LIST B					

3. Complete each of the following statements by writing the correct answer in the space provided
- a) _____ is a substance which is dangerous and can cause death within a short period of time. Example, jik and mercury.
- b) _____ is a dangerous substance which can affect our health when in use for a long period of time example tobacco, ammonia and paint.
- c) _____ is a substance which speed up the rate of burning or supply oxygen to another substance example, oxygen gas, hydrogen peroxide, chlorine gas and fluorine gas.
- d) _____ is a substance which catches fire easily example gasoil, spirit, methane, petrol, kerosine and diesel.
- e) _____ is a substance which cause gradual wearing out if contact with various materials. example concentrated sulphuric acid and concentrated sodium hydroxide

SECTION B (70 marks)
Answer **all** questions in this section

4. a) Define the term **warning signs**.

Danger of an electric shock	Flammable	Corrosive	Toxic

b) Draw the symbols for the following warning signs.

5. a) What is energy?

b) Outline any eight (8) forms of energy.

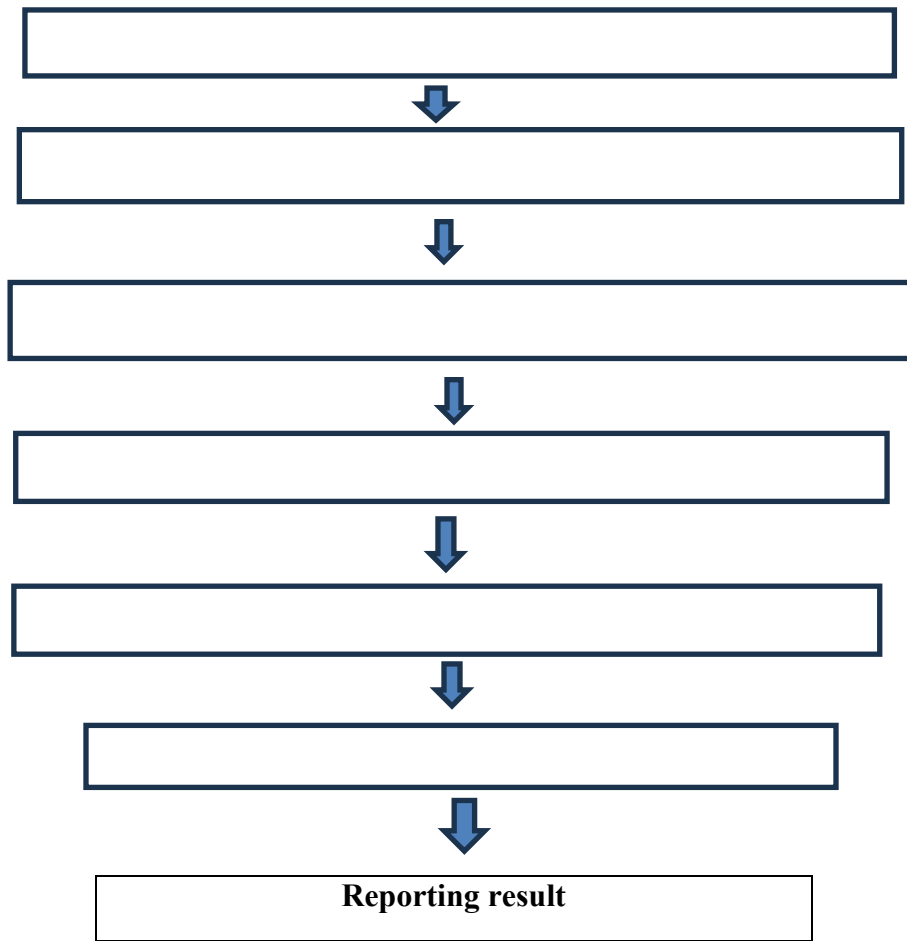
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|------------|-------------|
| i) _____ | v) _____ |
| ii) _____ | vi) _____ |
| iii) _____ | vii) _____ |
| iv) _____ | viii) _____ |

6. a) Define the following terms as used in scientific investigations.

i) Hypothesis.

ii) Controlled variable

b) Complete the scientific method flow chart when carrying out a scientific investigation



7. a) Define the following terms as used in the laboratory.

i) Laboratory.

ii) Laboratory rules.

b) Write down any six (6) laboratory rules.

- i) _____
- ii) _____
- iii) _____
- iv) _____
- v) _____
- vi) _____

8. a) Define the term matter?

b) Matter exists into three main states, support your answer by providing three (3) examples in each case.

i) _____ (state)

Examples:-

a) _____

b) _____

c) _____

ii) _____ (state)

Examples:-

a) _____

b) _____

c) _____

iii) _____ (state)

Examples:-

a) _____

b) _____

c) _____

9. a) Define the term First aid.

b) Form one student at Mivumoni Islamic Seminary was touching an electrical appliance with wet hand during practical session, suddenly he got an electric shock. Describe the steps on how you can administer first aid to him.

- i) _____
- ii) _____
- iii) _____
- iv) _____
- v) _____
- vi) _____
- vii) _____

10. Write down five (5) steps on how to operate portable fire extinguisher.

- i) _____
- ii) _____
- iii) _____
- iv) _____
- v) _____