darasahuru.ac.tz

MKALAMA DISTRICT COUNCIL
FORM ONE TERMINAL EXAMINATION, MAY 2025
PHYSICS
MARKING SCHEME

SECTION A (15 Marks)

1.

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
B	**B**	**D**	**A**	**C**	**C**	**B**	**A**	**A**	**B**

1Mark@ = 10Marks

2.

I.	II.	III.	IV.	V.
C	**F**	**D**	**A**	**E**

1Mark@ = 5marks

SECTION B (70 Marks)

3. (a) i. Physics is fun. **2Marks**
ii. Enables a person to answer questions about the physical properties of matter. **2Marks**
iii.Enable us acquire skills that are required in different professions such as engineering, teaching etc **2Marks**
iv. Physics helps to understand the working principle of home appliances such as electric irons. **2Marks**

(b) (i) Car 1Mark
(ii) Train 1Mark
(iii)Aero plane 1Mark
(iv) Ships 1Mark

(=10MARKS)

4. (a)

Fundamental physical quantities	SI unit
Length	Metre
Mass	Kilogramme
Time	second
6Marks	

(=10MARKS)

(b) i. ruler
ii. Tape measure
iii. calipers
iv. micrometer screw gauge

4Marks

5. (a)

Parallax error	**Zero error**
Are error caused by wrong positioning of the eye when reading measurement	Are error that occurs when measurement is taken with an instrument with the pointer below or above the zero mark.
2Marks	

(b) i. Eureka can2Marks
ii. Measuring cylinder2Marks

darasahuru.ac.tz

5. (c) solution

Data given

Mass of empty beaker = 48g

Mass of beaker + water = 60g 2Marks

Mass of water = Required **(=10MARKS)**

Mass of water = Mass of beaker + water - Mass of empty beaker

60g – 48g

12g

Mass of water only = 12g 2Marks

6. (a) **(i)**

Density	**Relative density**
Is the mass per unit volume of a substance	Is the ratio of density of substance to the density of water
2Marks	

(ii)

Mass	**Weight**
Is the quantity of matter in an object.	Is the attractive force toward earth center's center exerted by the earth on an object
2Marks	

(b) solution

Data given

Volume = $30cm^3$

Mass = 90g **1Mark**

Density = Required

(=10MARKS)

From Density = $\frac{mass}{volume}$

$=\frac{90g}{30cm3}$ **2Marks**

$= 3g/cm^3$

The density = $3g/cm^3$ 3Marks

7 (a)

Vector Quantities	Scalar Quantities
Are those quantities that have both magnitude and direction	Are those quantities that have magnitude but have no direction
5 Marks	

(b) i. At home 1Mark

ii. In medical field 1Mark **(=10MARKS)**

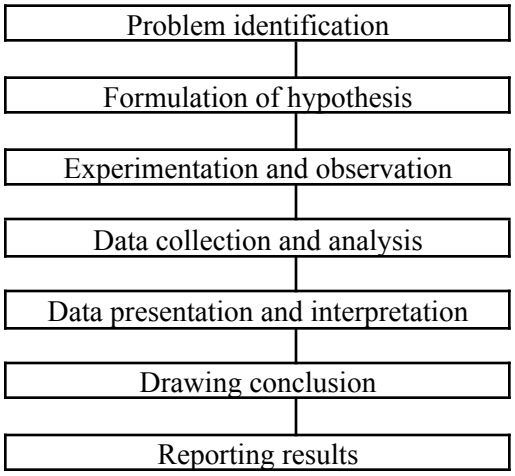
iii. Transport 1Mark

iv. communication 1Mark

darasahuru.ac.tz

8 (a) Is a set of techniques used by scientists to investigate a problem or answer a questions. 3Marks

(b)



1Mark@ = 7Marks **(=10MARKS)**

9 (a) Is the push or pull experienced by an object.

SI Unit of force NEWTON 3Marks

(b) solution

Data given

Weight = 30N

Gravitation field strength = 10N/Kg 1Mark

Mass = Required

From Weight = mass x Gravitational field strength **=10MARKS)**

$$\text{Mass} = \frac{30N}{10N/Kg}$$

mass =3Kg2Marks

(c)

Contact force	**Non-contact force**
These are force which act on an objects when the interacting object are in physical contact with each other.	These are force which act on an objects when the interacting object are not in physical contact with each other.
4Marks	

darasahuru.ac.tz

10. (a) Vernier caliper & meter rule. 3Marks

(b) solution

Data given

Height = 1.00cm

Width = 2.50cm

Length = 4.00cm

Volume = required

From ; volume = height x width x length

= 1.00cm x 2.50cm x 4.00cm

Volume of rectangular block= $10cm^3$ 6Marks **=15MARKS)**

(c) solution

Data given

Volume = $10cm^3$

Mass = 20g

Density = required Density = mass/volume =$20g/10cm^3$

Density = $2g/cm^3$ 6Marks