

PHYSICS FORM TWO NECTA 2007

Solutions from: Maktaba by TETEA

by Yohana Lozaro

1

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

xi	xii	xiii	xiv	xv	xvi	xvii	xviii	Xix	xx
A	B	B	C	C	A	B	A	D	D

2

i	ii	iii	iv	v	vi	vii	viii
P	I	L	A	E	C	K	N

3.(a)neutral point

(b) Elasticity

(c) Reduce friction

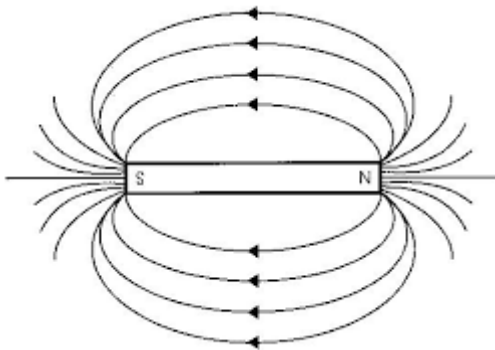
(d) Cohesive force pulls the mercury molecules together

4. (a)(i)conduction

(ii) Convection

(iii) Radiation

(b)



[www.toppr.com](http://www.toppr.com)

5(a) Machine is any substance which simplify work

(b)(i) Mechanical advantage is the ratio between the load and effort

(ii) Velocity ratio is the ratio between effort distance and load distance.

(iii) Mechanical advantage is the ratio between the work done output and work done input.

6. (a)  $100^{\circ}\text{C}$ ,

(b) Within the liquid molecules.

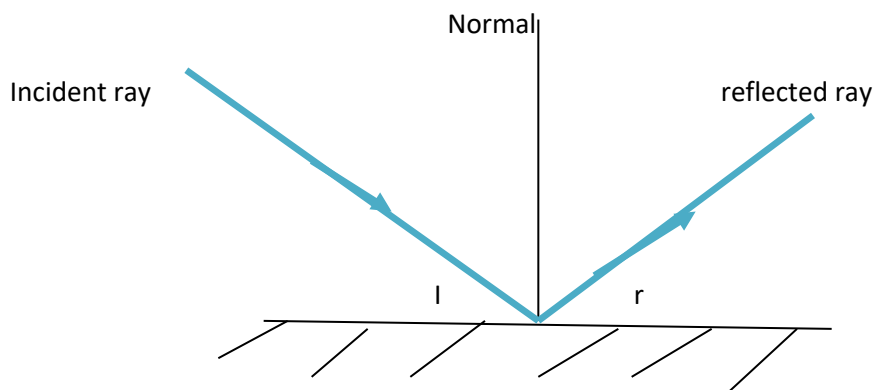
(c)(i) Temperature

(ii) Impurities.

7. (a)(i)  $V/T = \text{constant}$

(ii)  $PV = \text{constant}$

(b)



Relation is that,  $i = r$

8.

<b>MASS</b>	<b>WEIGHT</b>
i) measured by beam balance	i) measured by spring balance
ii) its SI unit is kg	ii) SI unit is Newton, N
iii) scalar quantity	iii) vector quantity.
iv) does not change	iv) changes when height changes
v) does not depend on the position of the body	v) depends on position of the body

9(a) Archimedes principle states that “when the body is partially or totally immersed in the body it experience an upthrust which is equal its weight immersed”

(b) Upthrust = real weight – weight in fluid

$$= 500\text{N} - 400\text{N}$$

$$= 100\text{ N}$$

10. (a) Deceleration = velocity change/time

$$= 0 - 90/10$$

Deceleration is  $9\text{m/s}^2$

(b) Fundamental law of static electricity states that, “like charges repel, unlike charges attract”

(c) The ammeter is placed on resistor to measure potential difference, instead of placing the voltmeter across the resistor to measure the voltage, and the ammeter should be connected in series with the battery.