

PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT
FORM TWO OPENING TEST
PHYSICS MARKING GUIDE

SECTION A (15 MARKS)

1. @ 1MARK =10

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

2. @ 1 MARK=5

i	Ii	Iii	iv	V
A	B	C	D	E

SECTION B (70 MARKS)

3. (a) Apparent weight 2 marks

(b) A piece of metal sink in water because the upthrust on it due to water is less than its weight, hence it sinks. Ships floats because they are made hollow in shape which increase their volumes and reduce their density compared to that of the water, as a result they float. 4marks

(c) From the density $(\rho) = \frac{\text{Mass}(m)}{\text{Volume}(V)}$

$$\text{Volume of 86.85g of pure gold} = \frac{0.08685\text{kg}}{193000\text{kg/m}^3} = 4.5 \times 10^{-6}\text{m}^3$$

$$\text{Volume of displaced water} = \frac{(0.08685 - 0.08035) \times 10^{-3}\text{kg}}{1000\text{kg/m}^3}$$

$$= 6.5 \times 10^{-6}\text{m}^3$$

Volume of the hole will be $(6.5 - 4.5) \times 10^{-6}\text{m}^3 = 2.0 \times 10^{-6}\text{m}^3$. 4marks

4.

5.

6.

7. **Kupata marking scheme hii full wasiliana na U.B.N COOPERATION**

8.

9.

SECTION C (MARKS 15)

10. (a)

(b) When pressure is applied to the brake pedal it pushes the piston in the master cylinder forward creating a pressure in the brake fluid. This pressure is transferred to the slave cylinders where the force is multiplied and pushes the brake shoes against the brake drum that is attached to the wheel of the vehicle. Friction between the brake shoes and the drum slows down the wheel's rotation. There are identical systems on all four wheels ensuring the same braking force on each wheel so that the vehicle slows down uniformly. When the pressure on the brake pedal removed, the return spring pulls the brake shoes away from the drum and the wheels become free to rotate.

4 marks

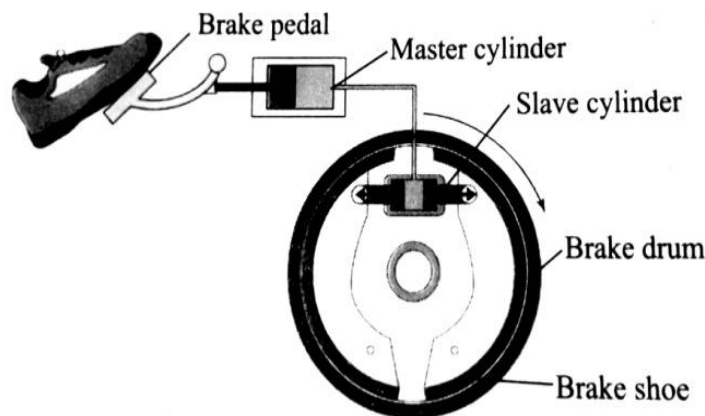


Diagram = 1.5 marks

Labelled = @0.5 marks = 2.5 marks

Total = 8 marks

KWA MAHITAJI YA

01. MITIHANI YA KILA MWEZI (MONTHLY TEST) KWA MASOMO YOTE NA VIDATO VYOTE

02. SERIES ZA 0-LEVEL KWA MASOMO YOTE NA VIDATO VYOTE

03. MITIHANI YA KIDATO CHA TANO NA SITA (ADVANCED SERIES) KWA COMBINATION ZOTE

OFA OFA

U.B.N COOPERATION TUNATOA OFA MAALUM YA KUJIUNGA NA GROUP LETU LA “U.B.N COOPERATION” KWA WAKUU WA SHULE NA WATAALUMA KWA TSH 50,000/= KWA KIDATO KIMOJA AMBAPO UTAPATA MITIHANI YA KILA MWEZI (MONTHLY TEST) KWA MASOMO YOTE NDANI YA MIEZI SITA. OFA HII NI KWA KIDATO CHA PILI NA CHA NNE TUU. ITANZA (MWEZI JANUARI – JUNE) MWISHO WA KUJIUNGA NA OFA HII NI TAREHE

05/01/2024

KWA MAWASILIANO TUCHEKI KWENYE NAMBA

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