

Mid Term II Examination-2019

S.1 PHYSICS

***Time: 1hr 30 mins***

**INSTRUCTIONS**

**Answer all questions in this paper**

1. Define the following

a) Fundamental quantities

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b) Derived quantities

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.....

2. Complete the table below

| Quantity | S.1 unit         | Symbol     |
|----------|------------------|------------|
| Length   |                  | m          |
|          | Kilogram         |            |
| Time     | Second           |            |
|          | Square metre     |            |
|          |                  | $M^3$      |
| Density  |                  | $Kgm^{-3}$ |
|          | Metre per second |            |
| weight   |                  | N          |
|          | Kelvin           | K          |

3. List three instruments used to measure length

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.....  
.....

4. Convert the following as instructed

a) 16.4 mm to metres

b) 0.092 km to metres

c) 20cm to metres

d) 50m to centimeters

5. Convert the following

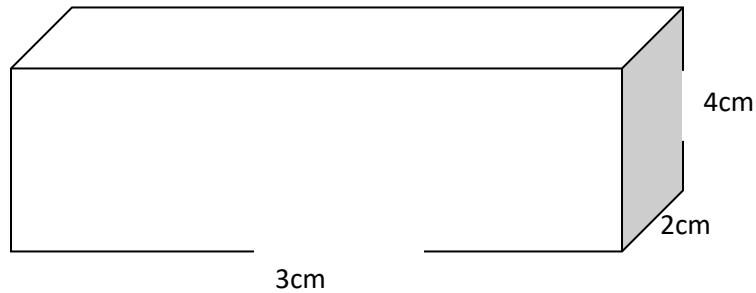
i)  $20\text{m}^2$  to  $\text{mm}^2$

ii)  $4.3\text{mm}^2$  to  $\text{cm}^2$

6. Define volume and state its S.I unit

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.....

b) Find the volume of the figure below in metres cubed



7. Explain how you can determine the volume of an irregular object

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8. a) Define density and state its S.I unit

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b) convert  $0.8 \text{ gcm}^{-3}$  in  $\text{kgm}^{-3}$

9. convert the following in scientific form

a) 934.74

b) 0.0000274

c) 1034342

10. Write the following to the stated significant figures

a)  $4.027 \times 10^{-2}$  to 3 s.f

b) 4347003 to 3s.f

c) 0.0000344 to 2s.f

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