

PHYSICS / SCI(PHYSICS)
 FORMULA TEST (* marked are for PURE PHYSICS)
 Singapore-Cambridge General Certificate of Education Ordinary Level (Syllabus 5076 & 6091)

NAME: _____ () CLASS: _____ DATE: _____

1. Units and Measurement

a)

ρ = density () ()
 m = () ()
 V = () ()

b)

W = weight ()
 m = ()
 g = (or)

2. Speed, Velocity and Acceleration

a) speed (m/s) = $\frac{\text{_____ (m)}}{\text{_____ (s)}}$

b) average speed (m/s)
 = $\frac{\text{_____ (m)}}{\text{_____ (s)}}$

c) velocity (m/s) = $\frac{\text{_____ (m)}}{\text{_____ (s)}}$

d)

a = acceleration ()
 v = ()
 u = ()
 t = ()

P = pressure ()
 p = ()
 g = ()
 h = ()

P = pressure ()
 F = ()
 A = ()

3. Forces, Energy, Work and Power

a)

F = ()
 m = ()
 a = ()

b)

K.E. = kinetic energy ()
 v = ()
 m = ()

c)

G.P.E. = gravitational potential energy ()
 m = ()
 h = ()
 g = ()

d)

M = moment ()
 F = ()
 d = ()

e) Principle of Moments (if object is balanced)

<input type="text"/>	<input type="text"/>
+ = +	+ = +

F are forces in Newton
 d are distances from pivot (m)

f)

W.D = Work done ()
 F = ()
 d = ()

g)

P = power ()
 $W.D$ = ()
 t = ()

h)

***** E = Efficiency ()

4. Light and Lenses

a) $n = \frac{\sin \text{---}}{\sin \text{---}}$

b) $n = \frac{\sin \text{---}}{\sin \text{---}}$

c) $n = \text{---}$

d) $n = \frac{1}{\sin \text{---}}$

e) $n = \frac{\text{--- height}}{\text{--- height}}$

- n = (no unit)
- i = (in °)
- r = (in °)
- c = ()
- v = ()
- n = ()
- c = ()

5. Waves

a)

- v = velocity ()
- f = ()
- $\lambda =$ ()

b)

- f = ()
- T = ()

6. Heat

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a)

- Q = ()
- c = specific heat capacity ()
- m = ()
- $\Delta\theta =$ ()

b)

- Q = ()
- C = heat capacity ()
- $\Delta\theta =$ ()

7. Electricity

a)

- EMF = ()
- W = ()
- Q = ()

- PD = ()
- W = ()
- Q = ()

- I = ()
- Q = ()
- t = ()

- R = ()
- V = ()
- I = ()

b)

- $R_{\text{total (series)}} =$ ()

- $R_{\text{total (parallel)}} =$ ()

- R = ()
- $f =$ ()
- A = ()

c) P =

P =

P =

- P = power ()
- V = ()
- I = ()

- R = ()

d) E =

E =

E =

- E = energy (J)
- V = ()
- I = ()
- t = ()

- E = energy (J)
- P = ()
- t = ()

e) Total cost =

- E = energy (kW h)

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c)

- Q = ()
- $l_f =$ specific latent heat of fusion ()
- m = ()

- Q = ()
- $L_f =$ latent heat of fusion ()

d)

- Q = ()
- $l_v =$ specific latent heat of vaporisation ()
- m = ()

- Q = ()
- $L_v =$ latent heat of vaporisation ()