Practice Question Set For GCSE
Subject : Physics
Paper-2 Topic: Forces (Low Demand Questions)

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Name of the Student:_____
Max. Marks : 21 Marks **Time : 21 Minutes**

Mark Schemes

Q1.

(a) (thinking distance) will double

1

any correct pair of points from graph eg (200,6) and (400,12)

allow graph shows direct proportionality (after 200 ms)

*allow **1** mark for thinking distance increases with supporting data.*

1

(b) (most) people cannot react any quicker than 200 ms

1

(c) there is variation in the measurements

allow the data is not very precise

allow lots of random error

ignore references to accuracy / reliability / average

1

(d) (258+265+302+248+327) / 5

*an answer of 280 gains **2** marks*

1

280 (ms)

1

(e) 8.4 (m)

allow 7.9 (m) to 8.9 (m)

allow ecf from part (d)

1

(f) any **two** from:

- (material of) road surface
- condition of the tyres
- speed of the car
- wet / icy road surface
- gradient of road
- mass / weight of the car

Ignore any reference to brakes

2

(g) work done = force × distance (along the line of action of the force)

allow W = F s

allow any correct re-arrangement

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1

(h)

*an answer of 450 000 scores **3** marks*

F = 6000 N

1

W = 6000 × 75

allow a correct substitution using an incorrectly / not converted value of F

1

W = 450 000 (J)

allow a correct calculation using an incorrectly / not converted value of F

1

[13]

Q2.

(a) distance

1

(b) BC

1

(c) DE

1

(d) 5.0 (s)

allow 5 (s)

1

(e) 6.0 (m/s)

allow 6 (m/s)

1

(f) 6.0 / 5.0

*allow ecf from parts **(d)** and **(e)***

1

= 1.2 (m/s^2)

1

*an answer of 1.2 scores **2** marks*

(g) about four times faster

1

[8]

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