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

Name of the Student:_____
Max. Marks : 24 Marks **Time : 24 Minutes**

Mark Schemes

Q1.

(a) taking drugs

1

tiredness

1

(b) 24 (years)

1

(c) 0.55 (s)

allow answer in range 0.54 to 0.56

1

(d) decreases

this order only

1

increases

1

(e) braking distance = $\frac{(12)^2}{(2 \times 3)}$

1

braking distance = 24

1

unit = m

1

(f) so they know how far behind another car they should drive

or

so they can stop safely if the car in front stops

1

[10]

Q2.

(a) (air resistance) increases

1

(b) less than

1

(c) $s = 35 \times 14$

1

$s = 490$ (m)

1

(d) work done = force × distance

or

$W = Fs$

1

(e) $54\,000\,000 = F \times 270$

1

$$F = \frac{54\,000\,000}{270}$$

1

$F = 200\,000$ (N)

1

(f) **Level 2:** Scientifically relevant features are identified; the way(s) in which they are similar/different is made clear and (where appropriate) the magnitude of the similarity/difference is noted.

4–6

Level 1: Relevant features are identified and differences noted.

1–3

No relevant content

0

Indicative content

- distance travelled is the same for each aeroplane
- time in the air is much greater for jet aeroplane
- speed of rocket plane is much greater
- speed of rocket plane is 32 times greater
- radiation dose each hour greater for rocket aeroplane
- radiation dose each hour is 2 times greater for rocket aeroplane
- overall radiation dose is less for rocket plane
- dose in jet aeroplane is 16 times greater overall
- much higher risk in jet aeroplane
- increased risk of skin cancer
- increased risk of gene mutation and cancer

To access level 2, there must be a relevant calculation.

[14]