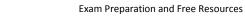
Practice Question Set For GCSE

Subject: Physics



Paper-2 Topic: GCSE Triple Science_Forces (Standard Demand Questions)

Name of the Student: Max. Marks : 23 Marks Mark Schemes		Time : 23 Minutes
(a)	a vector has direction (a scalar does not)	1
(b)	accept any vector quantities eg velocity force weight acceleration displacement	1
(c)	mass × velocity	
	do not accept speed for velocity do not accept symbols	1
(d)	kilogram(s) metre per second allow kg m/s	1
(e)	1.8 ms = 0.0018 s an answer of 60 (m/s) scores 4 marks	1
	$1500 = \frac{0.045 \times v \left(-0.045 \times 0\right)}{0.0018}$	1
	$v = \frac{1500 \times 0.0018}{0.045}$	1
	v = 60 (m/s) an answer of 60 000 scores 3 marks	1
(g)	longer the time of contact the greater the change of momentum allow the converse	1
	since the mass of the golf ball is constant	1
		1
	the velocity of the golf ball must increase	1

1

Q2.

(a) Third Law

(b) elastic potential

1

1

(c) weight = mass \times gravitational field strength

accept gravity for gravitational field strength

1

accept W = mg

accept correct rearrangement ie mass = weight / gravitational field

strength **or** m = W/g

(d) $343 = m \times 9.8$

1

m = 343

9.8

1

m = 35

1

allow 35 with no working shown for 3 marks

(e) force = spring constant \times compression

accept force = spring constant x extension

accept F = k e

accept correct rearrangement ie constant = force / extension $\mathbf{or} \ k = F /$

е

1

(f) compression = 0.07m

1

 $343 = k \times 0.07$

1

 $k = 343 \div 0.07$

1

k = 4900

1

allow 4900 with no working shown for **4** marks allow 49 with no working shown for **3** marks

[11]