Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic : Motion And Forces

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

Mark Schemes

Q1.

Question number	Answer	Additional guidance	Mark
	substitution (1) (W=) 6.0 x 1.6 evaluation (1) 9.6 unit (independent mark)(1) newton	award full marks for correct answer without working. accept N, n and/or Newton 9.6 N/n gains full marks	**(3)** **AO2**(2) **AO1**(1)

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Q2.

Question number	Answer	Additional guidance	Mark
(i)	1900 (N)	allow 1862 1864 190 × 10 190 × 9.8(1)	**(1)**

Question number	Answer	Additional guidance	Mark
(ii)	rearrangement (1) $\frac{700}{190}$ evaluation (1) 3.7 (N/kg)	 (g =) $\frac{W}{m}$ allow numbers that round up to 3.7 (N/kg) award full marks for the correct answer without working	**(2)**

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Q3.

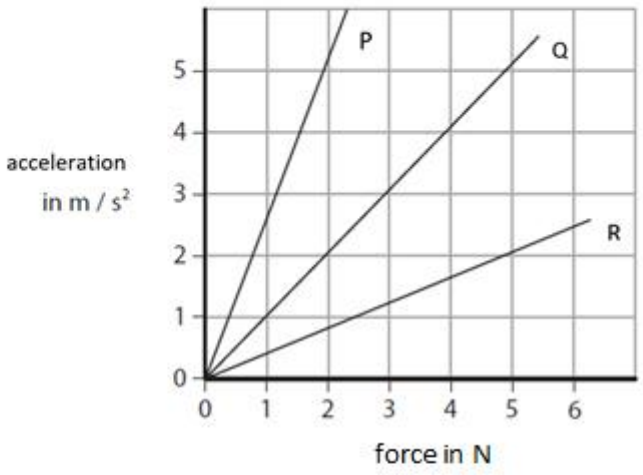
Question number	Answer	Additional guidance	Mark
(i)	substitution and conversion (1) v = 0.05/0.08 evaluation (1) v = 0.63 (m/s)	 full marks will be awarded for correct numerical answer without working	(2)

Question number	Answer	Additional guidance	Mark
(ii)	a= (v-u) / t (1)		(1)

Question number	Answer	Additional guidance	Mark
(iii)	substitution (1) (1.1-0.72) / 0.53 evaluation (1) 0.72 m/s^2	 full marks will be awarded for correct numerical answer without working	(2)

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Q4.

Question number	Answer	Additional guidance	Mark
(i)	 any correct points from line Q e.g. substitution (1) mass = 2/2 evaluation (1) 1 (kg)	Accept answers in the range 1 to 1.05 (kg) full marks will be awarded for correct numerical answer without working	(2)

Question number	Answer	Additional guidance	Mark
(ii)	an answer that combines points of interpretation to provide a logical description: • (trolley/it) has the smallest acceleration for the largest force • (and) m = F/a		(2)

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Q5.

Question number	Answer	Additional guidance	Mark
(i)	substitution Time = 37/ 25 (1) Evaluation (1) = 1.5 (s)	 Allow 1.48 (s) full marks will be awarded for correct numerical answer without working	(2)

Question number	Answer	Additional guidance	Mark
(ii)	substitution K.E. = 0.5 x 1300 x 20^2 (1) evaluation (1) = 260,000 J	 260 kJ full marks will be awarded for correct numerical answer without working	(2)

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Q6.

Question number	Answer	Additional guidance	Mark
	A description including two from let the car roll down the slope from the same point on the slope (1) measure distance it travels (along horizontal surface) (1) change the surface/ use different surfaces (1)	 see how far it travels allow time it takes to stop	**(2)** **AO1**

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