Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic : 2_Motion and Forces

Name of the Student:_____
Max. Marks : 17 Marks **Time : 17 Minutes**

Mark Schemes

Q1.

	Answer	**Acceptable answers**	**Mark**
(a)	D		**(1)**
(b)(i)	12 (m/s) (1)	Range from 11(m/s) to 14 (m/s)	**(1)**
(b)(ii)	Substitution (1) 20-0 / 5 evaluation (1) 4 (m/s^2)	20 / 5 Full marks for correct answer with no working Allow answers between 3.6 and 4.7 for 2 marks to reflect readings taken from the graph	**(2)**
b(iii)	• velocity/ speed (measured in) m/s (1) • divided by time in s (1)	velocity/ speed (measured in) ms^{-1} acceleration is rate of change of velocity m/s/s m per s per s [accept per for divide] do not accept m/s times time	**(2)**
b(iv)	at constant vel • distance = 60 (m) (1) slowing down • distance = ½×2×20 (1) • = 20 (m) (1)	correct answer scores 2 marks	**(3)**

Total for question = 10 marks

Q2.

Question Number	Answer	Acceptable answers	Mark
	{steady/constant} speed (at first) (1) (then) slows down (1)	accept velocity for speed ignore as time increases distance travelled increases (then) slower/less speed/decelerates/negative acceleration	**(2)**

Q3.

Question Number	Answer	Acceptable answers	Mark
(a)	stopwatch /stopclock (1) {trundle/measuring} wheel/measuring tape or tape measure (1) ignore speedometer/speed camera/radar	(electronic) timer timing app (on 'phone) clock and watch on their own are insufficient any suitable length measuring device e.g. accept metre {rule(r)/stick} but ruler on its own is insufficient **Answers may be in either order**	**(2)**

Question Number	Answer	Acceptable answers	Mark
(b) (i)	white (car) (1)	Allow the use of other columns that identify correct car e.g. 5.6(s)	**(1)**

Question Number	Answer	Acceptable answers	Mark
(b) (ii)	substitution (1) 80 ÷ 4.3 evaluation (1) 19 (m/s) Throughout the paper do not penalise answers to many places of decimal e.g. here 18.604651 gets both marks	Allow full marks for correct answer with no working seen. accept 18.6 (m/s) ignore 18 and 18.0 as incorrect rounding accept any power of 10 error for 1 mark	**(2)**

Question Number	Answer	Acceptable answers	Mark
(b) (iii)	40 (miles per hour) (1)	accept answers in range 39 – 43 (miles per hour) ecf from b(ii) multiply bii by 2.222 range +/- 2.0	**(1)**