Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic : Waves

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Name of the Student:_____
Max. Marks : 16 Marks **Time : 16 Minutes**

Mark Schemes

Q1.

Question number	Answer	Additional guidance	Mark
(i)	a description to include count the number of waves(1) (arriving/passing a point) in a specific time(1) use frequency = number of waves / time (1)	ignore in one second count the number of waves in one second scores 2 marks (MP1 and MP3) find the time between one wave and the next scores 2 marks (MP1 and MP2)	(3) AO1

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Question number	Answer	Additional guidance	Mark
(ii)	substitution (1) $1.5 = 0.7 \times \lambda$ rearrangement and evaluation 2.1(4) m	 $\frac{1.5}{0.7}$ allow $\frac{0.7}{1.5}$ for 1 mark award full marks for correct answer without working. $\lambda = v/f$ scores 1 mark	**(2)** **AO2**

Question number	Answer	Additional guidance	Mark
(iii)	A description to include: mention of oscillations/vibrations (1) EITHER transverse – (oscillations) perpendicular to direction of wave (travel) (1) OR longitudinal – (oscillations) in same direction as wave (travel) (1)	 up and down OR side to side (movements) OR back and forth transverse movement up and down but longitudinal is side to side (1 mark only)	**(2)** **AO1**

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Q2.

	Answer	Acceptable answers	Mark
(a)(i)	D		**(1)**
(a)(ii)	moons (1) heliocentric (1)	must be in correct order	**(2)**
(a)(iii)	A description including two of the following points Reflecting telescope has mirror(s) (1) Galilean telescope has only lenses (1) Reflecting telescope can gather more light / can have a larger objective (1) Image viewed from the side of reflecting telescope (1) Image viewed from end of Galilean telescope. (1)	refracting telescope reverse argument	**(2)**
(b)(i)	5 (cm) (1) 8 (cm) (1)	+5 -5 0.08 m 80 mm	**(2)**
(b)(ii)	B		**(1)**

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Q3.

Question Number	Answer	Acceptable answers	Mark
(i)	**X** amplitude (1) **Y** wavelength (1)		**(2)**

Question Number	Answer	Acceptable answers	Mark
(ii)	**A** (1)		**(1)**

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Q4.

Question number	Answer	Additional guidance	Mark
	wavelength gets shorter / decreases		**(1)**

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