

Name of the Student: \_\_\_\_\_

Max. Marks : 13 Marks

Time : 13 Minutes

Mark Schemes

Q1.

Question number	Answer	Additional guidance	Mark
	An answer that combines the following points of understanding to provide a logical description:  named force (acting at a distance) (1)  situation (1)	e.g. magnetic  force between two (magnetic) poles	(2)

Q2.

Question number	Answer	Additional guidance	Mark
	(upward) force increases with speed (1)  relationship is non-linear (1)	allow reverse argument  changing rate / increases exponentially/ initially no upward force (until 1000 turns per minute)	(2)

Q3.

Question Number:	Answer	Mark
(i)	<p>C gravitational</p> <p><b>The only correct answer is C</b></p> <p><i>A is not correct as the moon does not touch the Earth</i>  <i>B is not correct as the Earth does not carry a charge</i>  <i>D is not correct as the Earth has a magnetic field but it does not extend far enough to have any effect on the moon</i></p>	<p><b>(1)</b> AO 2 1</p>
Question Number:	Answer	Mark
(ii)	<p>C energy</p> <p><b>The only correct answer is C</b></p> <p><i>A is not correct as velocity is a vector quantity</i>  <i>B is not correct as momentum is a vector quantity</i>  <i>D is not correct as acceleration is a vector quantity</i></p>	<p><b>(1)</b> AO 1 1</p>

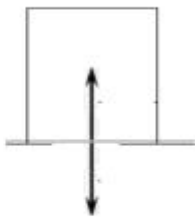
Q4.

Question number	Answer	Mark
(i)	B	<b>(1)</b>
Question number	Answer	Mark
(ii)	vertical arrow, acting downward through the suitcase	<b>(1)</b>

Q5.

Question Number:	Answer	Additional guidance	Mark
(i)	<p>an explanation linking:</p> <p>wheel rubs on axle (as it rotates) OR friction (between the wheel and the axle) (1)</p> <p>causes heating/transfer of (thermal) energy/ work being done (1)</p>	allow generates heat	(2) AO 1 1
Question Number:	Answer	Additional guidance	Mark
(ii)	<p>any one from:</p> <p>lubrication/oil (1)</p> <p>(ball) bearings / ball-race (1)</p> <p>go slower (1)</p>	anything that lubricates – grease etc.	(1) AO 1 1

Q6.

Question Number:	Answer	Additional guidance	Mark
	 <p>arrowed line vertically downwards (anywhere) (1)</p> <p>same length as vertical arrow upwards (1)</p>	<p>more than one line drawn 1 mark maximum</p> <p>judge by eye</p>	(2) AO 1 1