

Question number	Answer	Notes	Marks
6 a i	Power = current x voltage;	Accept <ul style="list-style-type: none"> <li>rearranged equation</li> <li>equation in recognised symbols</li> </ul>	1
ii	Substitution and rearrangement; Evaluation; eg $I = 2000 / 230$ 8.7 (A)	Accept <ul style="list-style-type: none"> <li>9 (A)</li> <li>8.695.....(A) ETC</li> </ul> NOT <ul style="list-style-type: none"> <li>8.6 incorrect truncation</li> <li>9.0 incorrect rounding</li> </ul>	1 1
iii	D            13 A		1
b	Series – single switch to control both; Parallel – independent control;	Allow idea of one element failing (and the other continuing) ignore comments about voltages or currents there is no mark for getting the 2 answers reversed	1

iii	Substitution and rearrangement; Calculation ; $\frac{12}{0.05 \times 1.6}$ 150 (m)	POT error loses 1 mark e.g. 0.15 (m) gets 1 mark	2
e	any Two from: • Value of g lower(on the Moon)/RA; • lack of air resistance (on the Moon)/RA; • Time of flight greater;	ignore • 'no gravity' allow • less gravity • drag for air resistance	2

(Total for Question 10 = 15 marks)