

Question number	Answer	Notes	Marks
2 (a)	the <b>rate</b> of flow of charge/electrons;	allow amount of charge per second, amount of charge per unit time	1
(b)	electron(s);	ignore words written in addition to electron(s)	1
(c) (i)	power = current $\times$ voltage;	allow standard symbols and rearrangements e.g. $I = P / V$	1
(ii)	substitution; rearrangement; evaluation;  e.g. $1400 = \text{current} \times 230$ (current =) $1400 / 230$ (current =) 6.1 (A)	-1 for POT error  allow 6, 6.09, 6.086...	3
(iii)	any two from: MP1. idea that wire has resistance; MP2. electrons collide with lattice ions;  MP3. idea of transferring energy (from electrons to wire/eq); MP4. increasing vibrations of lattice ions;	ignore friction allow sensible alternatives for lattice ions e.g. atoms in the wire etc. ignore generic references to "heat" allow sensible alternatives for lattice ions e.g. atoms in the wire etc.	2

Total for Question 2 = 8 marks