

Question number			Answer	Notes	Marks
3	(a)	(i)	power = voltage x current;	Accept rearrangements and symbols  e.g. current = power ÷ voltage, $P=IV$ , $I=P/V$  ignore  a triangle mnemonic an eqn in units	1
		(ii)	2.9 (A);	Accept 2.92 (A), 2.916 (A)	1
	(b)	(i)	Any <b>three</b> of :  MP1. if current gets too high/exceeds 13A or a set value; MP2. fuse (wire) melts / breaks; MP3. breaking circuit / switching off; MP4. prevents cable over heating;	allow:  fuse blows  stops current /flow of electrons	3
		(ii)	any <b>one</b> of: MP1. cable can't be fully extended; MP2. limits the use of the extension cable; MP3. can't exceed 1200 W; MP4. can't reach 10.0 (A) / max working value/eq;  <b>AND</b> (because otherwise) 5 A fuse will blow/ will cut the power;	allow RA      ignore vague comments re energy or power being too much or too high	2
		(iii)	(to prevent) the cable overheating/OWTTE;		1

Total 8 marks