Question number	Answer	Notes	Marks
3 (a)	A (current); B is incorrect because power is the rate of energy transferred C is incorrect because resistance is the ratio of voltage and current D is incorrect because voltage is the energy transferred per unit charge passed		1
(b)	D (voltage); A is incorrect because current is the rate of flow of charge B is incorrect because power is the rate of energy transferred C is incorrect because resistance is the ratio of voltage and current		1
(c) (i)	correct voltmeter symbol used; voltmeter drawn in parallel with S;	 condone drawn in parallel with R or the battery	2
(ii)	0.20 (A); 0.60 (A);	this order only allow 0.2 (A) this order only allow 0.6 (A)	2
(iii)	voltage = current × resistance; substitution; evaluation; e.g. $V = I \times R$ (V =) 0.40×11 (V =) 4.4 (V)	formula should be seen or implied by calculation allow standard symbols and rearrangements ignore C, c for current	3
(iv)	idea that voltage across battery is the same as voltage across R; (because) battery and R are connected in parallel / no other resistive components on loop with battery and R;	allow numerical value given e.g. 'voltage of battery = 4.4V'	2
(d)	idea that resistance (of thermistor) changes; when temperature increases, resistance decreases; (therefore) current increases when temperature increases;	allow even if relationship is the wrong way round ORA ORA	3

Total for Question 3 = 14 marks