Question Number	Answer		Mark
14(a)	10°C corresponds to 2.0 Ω	**(1)**	
	Use of ratio of resistances	**(1)**	
	Use of corresponding ratio of p.d.s	**(1)**	
	To a p.d. of 0.7(06) V	**(1)**	
	If temperature goes below this level then resistance of thermistor increases	**(1)**	
	So p.d. to heater (switch) increases and so heater switch does perform as required	**(1)**	
	Example of calculation $\frac{V}{6.0} = \frac{2.0}{15 + 2.0}$ $V = 0.706$ V		
	Or		
	10°C corresponds to 2.0 Ω	**(1)**	
	Use of $I = V/R$ for whole circuit	**(1)**	
	Use of $V = IR$ for thermistor	**(1)**	
	To a p.d. of 0.7(06) V	**(1)**	
	If temperature goes below this level then resistance of thermistor increases	**(1)**	
	So p.d. to heater (switch) increases and so heater switch does perform as required	**(1)**	**6**
	Example of calculation $I = 6.0$ V / (2 + 15) Ω = 0.353 A $V = 0.353$ A × 2.0 Ω = 0.706 V		
14(b)	Increase in temperature results in more electrons released **Or** Increase in temperature results in more electrons moving into conduction band	**(1)**	
	So resistance decreases (dependent on MP1)	**(1)**	**2**
	[allow converse argument]		
	Total for question 14		**8**