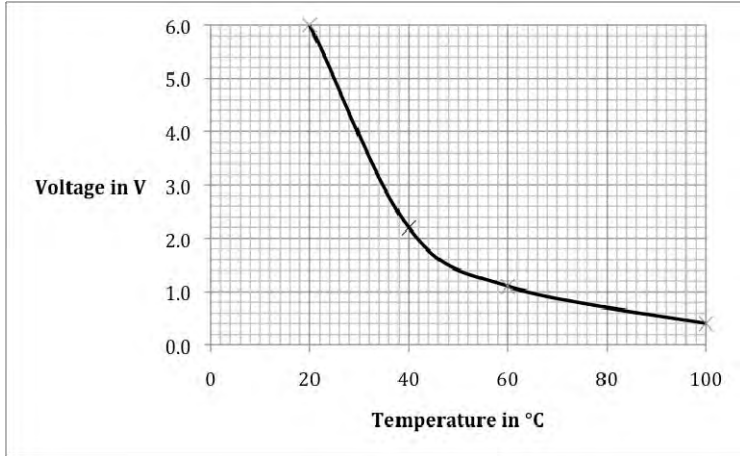


Question number	Answer	Notes	Marks												
4 (a)	Any three of - MP1 use a stirrer / stir with thermometer; MP2 centralise / spread heat source; MP3 move thermistor and thermometer to same level; MP4 move thermistor and thermometer closer together; MP5 Use thermometer with finer scale / digital thermometer;	Ignore repeat readings  Assume horizontal separation meant	Max 3												
(b)	(milli)Ammeter;	Allow ampmeter	1												
(c) (i)	Scale; (at least half the grid) Axes labelled including units; Plotting $\pm \frac{1}{2}$ small square;; Line of best fit; <div></div>	Accept axes reversed -1 each plotting error, minimum 0 for plotting Curve through either (80, 0.2) or (100, 0.4) Allow line bisecting these two points <table><tr><th>Temperature in °C</th><th>Voltage in V</th></tr><tr><td>20</td><td>6.0</td></tr><tr><td>40</td><td>2.2</td></tr><tr><td>60</td><td>1.1</td></tr><tr><td>80</td><td>0.2</td></tr><tr><td>100</td><td>0.4</td></tr></table>	Temperature in °C	Voltage in V	20	6.0	40	2.2	60	1.1	80	0.2	100	0.4	5
Temperature in °C	Voltage in V														
20	6.0														
40	2.2														
60	1.1														
80	0.2														
100	0.4														
(c) (ii)	DOP (80, 0.2) circled (if supported by line of best fit)	Allow (100, 0.4) circled if supported by line of best fit	1												