

- 2 (a) A resistance thermometer and a thermocouple thermometer are both used at the same time to measure the temperature of a water bath.

Explain why, although both thermometers have been calibrated correctly and are at equilibrium, they may record different temperatures.

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 [2]

- (b) State

- (i) in what way the absolute scale of temperature differs from other temperature scales,

.....
 [1]

- (ii) what is meant by the absolute zero of temperature.

.....
 [1]

- (c) The temperature of a water bath increases from 50.00°C to 80.00°C . Determine, in kelvin and to an appropriate number of significant figures,

- (i) the temperature 50.00°C ,

temperature = K [1]

- (ii) the change in temperature of the water bath.

temperature change = K [1]