

**TH-201**  
**ADIABATIC CALORIMETRY**

**Data for calculation of water equivalent (k) :**

i) **For A2a :**

Volume(ml)	m(g)	n(moles)	Ti (°C)	Tf(°C)	V(volts)	i (A)	t secs (for $\Delta T=2^{\circ}\text{C}$ )
150	*	*	29.3	31.3	16.3	2.7	79.2

ii) **For A2b :**

Volume(ml)	m(g)	n(moles)	Ti (°C)	Tf(°C)	V(volts)	i (A)	t secs (for $\Delta T=2^{\circ}\text{C}$ )
150	*	*	29.5	31.5	16.3	2.7	86.0

iii) **For A2c :**

Volume(ml)	m(g)	n(moles)	Ti (°C)	Tf(°C)	V(volts)	i (A)	t secs (for $\Delta T=2^{\circ}\text{C}$ )
150	*	*	29.6	31.6	16.3	2.7	79.8

iv) **For A2d :**

Volume(ml)	m(g)	n(moles)	Ti (°C)	Tf(°C)	V(volts)	i (A)	t secs (for $\Delta T=2^{\circ}\text{C}$ )
150	*	*	29.4	31.4	16.3	2.7	86.4

**Instructions :**

1. Each group should use the respective data from the above tables.
2. The mass (m) and number of moles (n) are to be calculated by the students using suitable formulae from the manual and standard values for density of water and acetone from literature.