

Question 1

$$T_i \text{ of thermometer} = 10^\circ\text{C}$$

$$T_o \text{ of temperature} = 20^\circ\text{C}$$

$$\text{Time taken} = 5 \text{ minutes} = 300 \text{ secs}$$

$$\text{Actual Temp} = (CT) = 24.9^\circ\text{C}$$

$$2 \text{ time } (2T) = ??$$

If from $1T$ to $5T = 20^\circ\text{C} - 10^\circ\text{C} = 10^\circ\text{C}$

and it takes 5 mins to cover 10°C

$$5^\circ\text{C} = \frac{1}{2} \text{ of } 5 \text{ mins}$$

$= 5^\circ\text{C} = 2.5 \text{ mins}$ (to ~~make~~ move from 20°C to 25°C)

$$\text{or } 25^\circ\text{C} = 2.5 \text{ m}$$

$$24.9^\circ\text{C} = ?$$

$$= \frac{2.5 \times 24.9}{25} \quad [25 \text{ min} = 150 \text{ secs}]$$

$$= \frac{150 \times 24.9}{25} = 6 \times 24.9 = 149.4$$

$$\therefore 149.4 \div 60$$

$$= 2.49 \stackrel{\Omega}{=} \underline{\underline{2 \text{ mins } 49 \text{ secs}}}$$

```
- commandwindow
- clear
- clc
- close all
- format short g
- mdata=xlsread('onlinequizdata','fluiddata')
- x=mdata(1:2:250,1)
- y=mdata(1:2:250,2)
- plot(x,y)
- grid on
- grid minor|
```

I

Command Window

```
86
88
90
92
94
96
98
100
102
```

script

Ln 11 Col 11

