(1.) $\bar{T}_0 = 10^\circ c$

Temperature equation = 53mm = $T_1 = 20^\circ c$

$T_2 = 25^\circ c$

Thus, it took 5 mins for the temperature to rise by $(T_1 - T_0) = (20-10)$

$= 10^\circ c$

Time taken to reach $25^\circ c$ =

$$\frac{T_2 - T_0}{T_1 - T_0} \times 5$$

$$= \frac{25-10}{20-10} \times 5$$

$= \frac{15}{10} \times 5 = 7.5$ mins after the thermometer is inserted in the system.

yimaquiz2.m

```
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
```

Command Window

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

script Ln 11 Col