

1) calculate the time delay for given program for the frequency at 2.5 MHz

Code : \rightarrow

LXI B FFFF	\rightarrow 10
DCX B	\rightarrow 6
MOV A, C	\rightarrow 4
ORA B	\rightarrow 4
JNZ back	\rightarrow 10/2

frequency of clock \Rightarrow 2.5 MHz

$$\text{Time} = [10 + 65535(6 + 4 + 4 + 10) - 3] \div 2.5$$

$$\Rightarrow \frac{1572847}{2.5 \times 10^6}$$

$$\Rightarrow 629.1388 \times 10^{-6}$$

$$\Rightarrow \underline{\underline{0.62918}}$$