

OR					
Q.6	a.	Convert i) $(456.78)_{10} = (?)_2$ ii) $(642.053)_8 = (?)_{16}$	6	L2	CO3
	b.	Find the base - x if $(211)_x = (152)_8$	4	L3	CO3
	c.	Explain the design procedure for combinational logic circuits and implement full adder using basic gates.	10	L2	CO3
Module – 4					
Q.7	a.	Define Embedded system and explain different elements of embedded system with neat block diagram.	8	L2	CO4
	b.	With block diagrams, explain Instrumentation and control systems.	8	L2	CO4
	c.	Compare microprocessors and microcontrollers.	4	L2	CO4
OR					
Q.8	a.	Explain the classification of Embedded systems.	8	L1	CO4
	b.	Explain how 7-segment display can be used to display alphanumeric characters.	8	L2	CO4
	c.	Explain working of Light Emitting Diode.	4	L1	CO4
Module – 5					
Q.9	a.	Define communication system, communication channel and explain different types of channels in communication systems.	6	L2	CO51
	b.	Define noise and explain different types on noise in communication system.	6	L2	CO5
	c.	Explain different modes of Radio Wave Propagation.	8	L2	CO5
OR					
Q.10	a.	With a block diagram, explain Modern Communication System.	7	L2	CO5
	b.	What is Modulation, why it is needed? Explain Amplitude Modulation with suitable waveforms.	7	L2	CO5
	c.	With suitable waveforms, explain ASK and FSK modulation schemes.	6	L2	CO5
