Vivekananda College of Engineering & Technology, Puttur [A Unit of Vivekananda Vidyavardhaka Sangha Puttur ®] Affiliated to VTU, Belagavi & Approved by AICTE New Delhi

CRM08

Rev 1.11

<FY>

09/02/22

CONTINUOUS INTERNAL EVALUATION - 2

Dept: FY	Sem / Div: 1 DEF	Sub:Basic Electronics & Communication Engineering	S Code: 21ELN14
Date: 18-02-2022	Time: 9:30-11:00	Max Marks: 40	Elective:N

Note: Answer any 2 full questions, choosing one full question from each part.

Q	N	Questions	Marks	RBT	CO's				
	PART A								
1		Discuss the design of a 3-bit asynchronous up-counter with the timing diagram.	8	L3	CO2				
		With the help of truth table explain full adder using logic gates.	6	L2	CO2				
		Design a 3-to-8 Decoder and show its implementation using basic gates.	6	L3	CO2				
OR									
2	a	With a neat block diagram show how typical input and output blocks are connected to a Microcontroller unit.	8	L2	CO2				
	b	Design a 4-stage shift register using J-K bistables.	6	L3	CO2				
		With the help of a timing diagram explain how D-type bistable circuit works.	6	L2	CO2				
	PART B								
3		Compare Embedded systems and general computing systems. Also provide major application areas of Embedded Systems.	8	L2	CO3				
	b	Bring out the differences between RISC and CISC,	6	L2	CO3				

Harvard & Von-Neumann architecture.			3				
c Explain the different configurations of 7-segment LED Display.		L2	CO2				
OR							
4 a Explain the working, principle of operation and applications of stepper motor.	8	L3	CO2				
b Give the classification of transducers with examples.	6	L2	CO2				
c Write a note on classification of embedded systems.		L2	CO3				

Prepared by: Vinay P

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