

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

CRM08

Rev 1.9

CSE

10/03/2022

CONTINUOUS INTERNAL EVALUATION - 3

Dept:CSE	Sem / Div: 3/A&B	Sub:Computer Organization	S Code:18CS34
Date:17/03/2022	Time: 3:00-4:30	Max Marks: 50	Elective:N

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

QN	Questions	Marks	RBT	CO's
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PART A

1 a	Write down the steps of booth multiplication algorithm. Perform booth multiplication between $(-13) * (-11)$	10	L3	CO4
b	Write down the steps of non restoring division algorithm. Apply non restoring division algorithm on $25/5$	10	L3	CO4
c	Using bit pair recoding multiply $(+20) * (-10)$	5	L3	CO4

OR

2 a	Using sequential multiplication, multiply $22 * 10$	10	L3	CO4
b	Write down the steps of restoring division algorithm. Apply restoring division algorithm on $20/8$	10	L3	CO4
c	Explain with a neat figure the circuit arrangement for binary division	5	L3	CO4

PART B

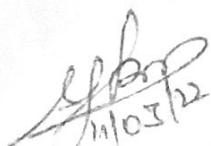
3 a	Discuss with a neat diagram, the single bus organization of the data path inside a processor	10	L2	CO3
b	What is pipe lining? Illustrate with 4 stage operation	10	L2	CO3
c	Write the control sequence for the execution of the instruction Add (R3), R1 in the execution of a complete instruction	5	L3	CO3

OR

4	a	Explain three bus organization of data path with a neat block diagram. Write the control sequence for instruction Add R4, R5, R6 for 3 bus organization	10	L2	CO3
	b	What do you mean by micro instruction? Design basic organization of a micro programmed control unit with diagram.	10	L2	CO3
	c	Explain different types of hazards affecting pipeline performance with suitable diagrams.	5	L3	CO3




Prepared by: Radhika Shetty D S /Ajay Shastri



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