HALL TICKET NUMBER

PACE INSTITUTE OF TECHNOLOGY & SCIENCES::ONGOLE
(AUTONOMOUS)
II B.TECH I SEMESTER END SUPPLEMENTARY EXAMINATIONS, MARCH/APRIL - 2023
COMPUTER ORGANIZATION
(Common to AIDS,AIML Branches)

Time: 3 hours   Max. Marks: 60

Note: Question Paper consists of Two parts (Part-A and Part-B)
PART-A
Answer all the questions in Part-A (5X2=10M)

Q.No.		Questions	Marks	CO	KL
1.	a)	Define Structure and function	[2M]	1	
	b)	What is the purpose of control memory	[2M]	2	
	c)	Express +101.11 in floating point with 6 bit fraction and 4 bit exponent	[2M]	3	
	d)	Define i) Address Space ii) Memory Space	[2M]	4	
	e)	Define Cluster	[2M]	5	

PART-B
Answer One Question from each UNIT (5X10=50M)

Q.No.		Questions	Marks	CO	KL
		UNIT-I			
2.	a)	Discuss about i) Register Stack Organization ii) Memory Stack Organization	[5M]	1	
	b)	Discuss about Input output reference Instructions with suitable micro-operations	[5M]	1	
		OR			
3.	a)	Discuss about Register reference instruction with suitable micro-operations	[5M]	1	
	b)	Elaborate given expression (A+B) *(C+D) using i) One Address ii) Zero Address Instruction Formats	[5M]	1	
		UNIT-II			
4.	a)	Construct Common Bus system consists of 4 Registers with 4 bits each using Tristate Buffers	[5M]	2	
	b)	Design control unit with neat diagram	[5M]	2	
		OR			
5.	a)	Construct 4-bit Shift microoperation circuit with neat diagram	[5M]	2	
	b)	Differentiate between Hard wired and Miro Programmed Control unit	[5M]	2	
6.	a)	Represent the +100101.11 in floating point with 10 bit fraction and 6 bit exponent and discuss in detail	[5M]	3	
	b)	Draw the flow chart of Division algorithm discuss with example	[5M]	3	
		OR			
7.	a)	Draw the flow chart of Booth multiplication algorithm with example	[5M]	3	
	b)	Discuss the subtraction of unsigned numbers using r-1's complement with example	[5M]	3	

		UNIT-IV			
8.	a)	Discuss about Virtual Memory with one example	[5M]	4	
	b)	Discuss about Programmed I/O with neat diagram	[5M]	4	
		OR			
9.	a)	Discuss about Daisy Chaining Priority Interrupt	[5M]	4	
	b)	Discuss about Associate Memory	[5M]	4	
		UNIT-V			
10.	a)	Discuss about Array Processing	[5M]	5	
	b)	Discuss about Symmetric Multiprocessor	[5M]	5	
		OR			
11.	a)	Discuss about Vector Processing	[5M]	5	
	b)	Multi-Processors Vs Multi computers	[5M]	5	

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