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Question Paper Code: 16MCAP103

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE

(UGC-AUTONOMOUS)

MCA I Year I Semester (R16) Supplementary End Semester Examinations –August 2022

COMPUTER ORGANIZATION

Time: 3Hrs

Max Marks: 50

Attempt all the questions. All parts of the question must be answered in one place only.

In Q.no 1 to 5 answer either A or B only

Q.No	Question	Marks	CO	BL
Q.1(A)	a. How negative integer number represented in memory? Explain with suitable example?	6M	1	3
	b. Explain floating point representation?	4M	1	1
	OR			
Q.1(B)	a. Explain Multiplexer functionality?	5M	1	2
	b. Differentiate various types of Flip Flops?	5M	1	3
Q.2(A)	a. Explain with neat diagram, the basic organization of a micro-programmed control unit?	10M	2	2
	OR			
Q.2(B)	a. Explain RISC and list its characteristics?	6M	2	2
	b. Write the difference between RISC and CISC processors.	4M	2	3
Q.3(A)	a. Draw and explain the flowchart of instruction cycle?	5M	3	2
	b. Explain any three addressing modes with example?	5M	3	2
	OR			
Q.3(B)	a. Explain, how data transfers can be controlled using handshaking technique in detail?	10M	3	2
Q.4(A)	a. Explain memory hierarchy and its importance?	5M	4	1
	b. Differentiate SRAM and DRAM?	5M	4	2
	OR			
Q.4(B)	Define cache memory? Explain Associative mapping technique?	10M	4	2
Q.5(A)	a. List the functions of an I/O interface.	4M	5	2
	b. Explain the use of PCI bus in a computer system with necessary figure.	6M	5	2
	OR			
Q.5(B)	Differentiate synchronous and asynchronous data transfer with examples?	10M	5	3

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