

(Please write your Enrolment No. immediately)

Enrolment No. 177

## CLASS TEST

B. TECH PROGRAMMES

3<sup>rd</sup> semester, December 2023

PAPER CODE: ECC-207

SUBJECT: DIGITAL LOGIC AND COMPUTER DESIGN

TIME: 1 Hrs.

MAX. Marks: 30

Note: Attempt Question No. 1 which is compulsory and any two more questions from remaining.

<u>Q.No.</u>	<u>Question</u>	<u>Max. Marks.</u>	<u>CO(s)</u>
Q.1 (a)	Differentiate between CISC & RISC characteristics.	(3)	(CO3)
(b)	Explain the concept of cache memory in a basic computer.	(3)	(CO4)
(c)	What is an instruction cycle?	(2)	(CO3)
(d)	Explain micro-operations in microprogramming with a few suitable examples.	(2)	(CO3)
Q.2	Explain the organization of hard-wired and micro-programmed control unit (CU) with proper diagrams.	(10)	(CO3)
Q.3 (a)	Design a basic logical unit of ALU of a basic micro-computer.	(5)	(CO3)
(b)	Explain interrupts and their types.	(5)	(CO4)
Q.4 (a)	Explain types of instructions and their addressing modes with proper examples.	(5)	(CO3)
(b)	Discuss internal configuration of a DMA controller.	(5)	(CO4)