

**III SEMESTER B.Tech
MID-SEMESTER EXAMINATION 2021**

Course Code- COECC08/CAECC08/CDECC08
Course Title- Microprocessor and Microcontrollers
Time: 1:30 Hrs

Max Marks: 15

Attempt all questions. Missing data/information (If any), may be suitably assumed & mentioned in the answers.

Q. No.	Questions	Marks	CO
Q 1	a) List the various registers of 8085 and explain their functions	1.5	CO1
	b) Explain the purpose of program counter, stack pointer, and status flag in the architecture of Intel 8085.	1.5	CO1
Q 2	(a) Explain the following 8085 instructions: LHLD 2500 STAX	2	CO1
	(b) Mention the machine cycles encountered in the execution of PUSH instruction	1	CO1
Q 3	a) Write an 8085 ALP for multiplication of two 8-bit numbers	1.5	CO1
	b) Draw and explain timing diagram for I/O write operation.	1.5	CO1
Q 4	a) Define and explain memory segmentation in 8086	1.5	CO2
	b) Explain addressing modes of 8086 microprocessor with example	1.5	CO2
Q 5	a) Write an 8086 ALP to find the largest element in an array of elements.	1.5	CO2
	b) Discuss how vectored interrupt of 8086 are triggered, enabled and masked	1.5	CO2