Sub Code: BECT501 **ROLL NO……..……..**

ODD SEMESTER EXAMINATION, 2024 – 25

III Year (V Sem) B.Tech.: Electronics & Communication Engineering

Microprocessor and Interfacing

Duration: 3:00 hrs **Max Marks: 100**

Note: - Attempt all questions. All Questions carry equal marks. In case of any ambiguity or missing data, the same may be assumed and state the assumption made in the answer.

Q 1.	Answer any two parts of the following.	(10x2= 20)
	a) (i) Discuss the General-Purpose registers in 8086 Microprocessor.	(5 marks)
	(ii) Discuss the difference between CALL and JUMP instructions.	(5 marks)
	b) Draw and explain the Minima and Maxima mode of 8086 Microprocessor.	(10 marks)
	c) Discuss the Advantages and disadvantages of RISC and CISC Processors.	(10 marks)
Q 2.	Answer any two parts of the following.	(10x2= 20)
	a) (i) Define the flag registers available in 8066 Microprocessor.	(5 marks)
	(ii) Mention Logical instructions in 8086 Microprocessor.	(5 marks)
	b) Write a program to calculating the factorial of a number in 8086 Microprocessor.	(10 marks)
	c) Discuss Addressing modes of 8086 Microprocessor.	(10 marks)
Q 3.	Answer any two parts of the following.	(10x2= 20)
	a) (i) How Keyboard is interfaced with 8086.	(5 marks)
	(ii) Mention the pin configuration of 8155 chip	(5 marks)
	b) Draw and explain the connection of Analog to Digital converter with 8086.	(10 marks)
	c) Write assembly program to turn on and off 8 LEDs using 8086.	(10 marks)
Q 4.	Answer any two parts of the following.	(10x2= 20)
	a) (i) What is the need of General purposes programmable peripheral devices.	(5 marks)
	(ii) Mention the difference between 8253 and 8254 chip.	(5 marks)
	b) Draw and explain the block diagram of 8259A programmable interrupt controller.	(10 marks)
	c) Discuss the USART.	(10 marks)
Q 5.	Answer any two parts of the following.	(10x2= 20)
	a) (i) Mention the difference between 8-bit and 16-bit microcontrollers.	(5 marks)
	(ii) Write applications of 8051 Microcontroller.	(5 marks)
	b) Discuss the architecture of 8051.	(10 marks)
	c) Discuss the interrupts of 8051 Microcontroller.	(10 marks)

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