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B.Tech. || EE || 4th Sem. (RG)

Microprocessors

Subject Code :BTEE-404A

Paper ID : _____

Time allowed: 3 Hrs

Max Marks: 60

Important Instructions:

- All Questions are Compulsory.
- Assume any missing data

PART A (2×10)

Q. 1.	Short Answer Questions.
(a)	What is difference between 8 bit and 16 bit processors?
(b)	Brief about microprocessor evolution.
(c)	Define microprocessor.
(d)	What are machine cycles? List and brief different types of machine cycles.
(e)	What are different parts of the instructions? Explain with the help of example.
(f)	What are different types of IF-THEN instructions of 8086?
(g)	Differentiate between timers and counters?
(h)	List the major differences between 8085 and 8086 microprocessors.
(i)	What is the use of D/A converter? List few applications where it is used?
(j)	What are interrupts? List 8085 interrupts.

PART B (5×8)

2.	Draw and explain the architecture of 8085. OR What is the use of microprocessors? What are different types of microprocessors? Write a note on microprocessor evolution.	CO1
Q. 3.	Draw and explain the architecture of 8086? What are improvements in 8086 as compared to 8085? OR What are different addressing modes of 8085? Explain with the help of examples.	CO2

Q. 4.	<p>What are different types of pins of 8086? Draw and explain the pin diagram of 8086.</p> <p>OR</p> <p>What do you understand by instruction set? Write and explain at least 10 instructions of 8085 assembly language.</p>	CO2
Q. 5.	<p>Write the 8086 program to find the maximum of given 10 numbers.</p> <p>OR</p> <p>What are different types of flags of 8086? Explain the bit structure of flag register of 8086.</p>	CO3
Q. 6.	<p>Draw and explain the circuit of interfacing keyboard with microprocessor.</p> <p>OR</p> <p>What are different types of alpha-numeric displays? Explain how is it interfaced with microprocessor?</p>	CO4