

PRAGATI ENGINEERING COLLEGE: SURAMPALEM
(AUTONOMOUS)
III B.Tech II Semester Regular/Supplementary Examinations, April - 2024
MICROPROCESSORS AND MICRO CONTROLLERS
(ECE)

Time: 3 hours

Max. Marks: 70M

Answer ONE Question from each Unit
 All Questions Carry Equal Marks

Q. No.	Question	BTL	CO	Marks
UNIT – I				
1.	a) Explain the architecture of 8085 processor with neat diagram.	K2	CO1	7M
	b) Explain in detail the interrupt structure of 8086.	K2	CO1	7M
OR				
2.	a) Compare Microprocessor and Micro Controllers.	K2	CO1	7M
	b) Draw and discuss the Write cycle timing diagram of 8086 in Minimum mode and Maximum mode.	K4	CO1	7M
UNIT – II				
3.	a) What are assembler directives? Discuss briefly about various assembly language program development tools.	K2	CO2	7M
	b) Explain the different types of addressing modes present in 8086. Give examples.	K2	CO2	7M
OR				
4.	a) Write an assembly language program to arrange the given series of numbers in an ascending order.	K3	CO2	7M
	b) Write an Assembly Language program for String Comparison.	K3	CO2	7M
UNIT – III				
5.	a) Explain the operation of DMA Controller 8257. How it is interfaced to 8086.	K2	CO3	7M
	b) Explain with neat sketch Intel 8259 Programmable Interrupt Controller.	K2	CO3	7M
OR				
6.	a) Explain how to interface a Digital to Analog Converter with 8086 Microprocessor?	K2	CO3	7M
	b) Write short note on software and hardware interrupt applications.	K1	CO3	7M
UNIT – IV				
7.	a) Discuss memory organization of 8051.	K2	CO4	7M
	b) Draw and explain the Pin Diagram of 8051.	K2	CO4	7M
OR				
8.	a) What are the various addressing modes of 8051? Explain.	K2	CO4	7M
	b) Explain the procedure for interfacing a keyboard with 8051.	K2	CO4	7M
UNIT – V				
9.	a) Write a short note on System address map	K1	CO5	7M
	b) Explain the following with respect to ARM i) Loops ii) Stack Pointer	K2	CO5	7M
OR				
10.	a) Illustrate the ARM Architecture	K2	CO5	7M
	b) Explain Nested Vector Interrupt Controller	K2	CO5	7M