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ROYAL SCHOOL OF ENGINEERING & TECHNOLOGY (RSET)
B.Tech. CSE, 6th SEMESTER
Special Supplementary Examination, August 2024
Course Title: MICROPROCESSOR
Course Code : ECE022C609

Time: 3 hours

Maximum Marks: 70

Attempt all questions as per instructions given
The figures in the right-hand margin indicate marks

Section-A

Q. No.	Answer the following in brief (within 50 words)	Marks	CO	BT Level
1(a)	Define stack segment register.	2	CO 1	BT 1
1(b)	Compare external and internal bus	2	CO 2	BT 2
1(c)	Identify two modes of operations in 8086?	2	CO 3	BT 3
1(d)	Analyze the assembler directives there in 8086?	2	CO 4	BT 4
1(e)	Define D/A convertor.	2	CO 1	BT 1
1(f)	List the disadvantage of parallel communication over serial communication.	2	CO 1	BT 1
1(g)	What are the different operand types used in 8051.	2	CO 1	BT 1
1(h)	What is meant by PSW in 8051?	2	CO 1	BT 1

Section-B

Q. No.	Answer any two of the following (Within 300 words each)	Marks	CO	BT Level
2 (a)	Analyse any four miscellaneous instructions in 16-bit processor.	6	CO 4	BT 4
2 (b)	Analyse the conditions which cause 8086 to perform type 0 and type 1 interrupt. .	6	CO 4	BT 4
2 (c)	Outline the different type of addressing modes of 8086.	6	CO 2	BT 2

Q. No.	Answer any two of the following (Within 300 words each)	Marks	CO	BT Level
3 (a)	Summarize the maximum mode configuration of 8086 with a neat diagram.	7	CO 2	BT 2
3 (b)	Explain how synchronization is made between 8086 and its co-processor.	7	CO 2	BT 2
3 (c)	Explain the architecture of 8086.	7	CO 2	BT 2

Q. No.	Answer any two of the following (Within 300 words each)	Marks	CO	BT Level
4 (a)	Identify how DMA controller transfers large amount of data from one memory location to another memory location.	7	CO 3	BT 3
4 (b)	Analyze 8257 functions in different modes to accommodate different kinds of I/O devices?	7	CO 4	BT 4
4 (c)	Explain the internal architecture of 8257.	7	CO 2	BT 2

Q. No.	Answer any one of the following (Within 300 words each)	Marks	CO	BT Level
5 (a)	Construct the timing diagram of memory read and memory write operation of 8086 microprocessor and explain in detail.	14	CO 3	BT 3
5 (b)	Illustrate in detail about the architecture of 8051 microcontroller with neat diagram.	14	CO 2	BT 2

Course Outcomes	Marks Allotted	Percentage
CO1	10	Approx 60%
CO2	50	
CO3	23	Approx 20%
CO4	21	Approx 20%