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Examination: Even Semester Examination 2023

Paper Name: Microcontrollers
Time: 3 Hours

Paper Code: BTECE-403 (Lateral Entry)
Maximum Marks: 75

Section A

Note: Attempt all the questions

(7x5=35)

Q. No.	Question	Marks	CO	BL
1.	What are the functions of an accumulator and general-purpose registers of 8085 microprocessor?	5	CO1	BL2
2.	How many interrupts does 8085 microprocessors, mention them?	5	CO2	BL1
3.	What is pipelining? How it improves the processing speed?	5	CO3	BL3
4.	Describe Memory segmentation in 8086 and list its advantages.	5	CO3	BL5
5.	Write an Assembly language program to add two 16 bits numbers for 8085.	5	CO4	BL5
6.	What is the concept of virtual memory?	5	CO3	BL3
7.	Justify how ARM instruction set is suitable for embedded applications.	5	CO5	BL5

Section B

Note: Attempt any four (4) Questions

(4x10=40)

Q. No.	Question	Marks	CO	BL
1.	Classify 8085 instructions in various groups and give example of instructions for each group.	10	CO1	BL3
2.	Discuss architectural advancement in Pentium Processors in brief.	10	CO4	BL3
3.	Discuss and describe 8255 PPI with the help of a neat diagram.	10	CO4	BL2

4.	Explain 8051 controller with the help of a neat diagram.	10	CO5	BL6
5.	Explain the important design rules of RISC Processor.	10	CO5	BL1
6.	With a neat diagram explain the different general-purpose registers of ARM processors.	10	CO5	BL2

BL: Blooms Taxonomy Level; (1-remembering, 2-understanding, 3-apply, 4-analyse, 5-evaluate, 6- create)