

Roll No	2	1	9	2	0	6	9
---------	---	---	---	---	---	---	---

Even End Back Paper Examination- Feb 2024

Name of Course: BCA

Name of Paper: Microprocessor

Time: 3 Hour's

Semester: IV

Paper Code: TBC 402

Maximum Marks: 100

- All questions are compulsory.
- Answer any two sub questions among a, b and c in each main question.
- Total marks in each main question are twenty.
- Each question carries 10 marks.

Q1. (10 X 2=20 Marks)		CO1
(a)	Discuss the Evolution of Intel 8085 to Pentium Pro Series microprocessors.	
(b)	Write shot notes on the following. i. General purpose Registers. ii. Control signals iii. Stack pointer iv. Interrupts	
(c)	Describes the Internal Architecture of 8085 microprocessor with neat diagram.	
Q2. (10 X 2=20 Marks)		CO2
(a)	Determine the Address Range of each RAM of size 8Kbyte interfaced with Microprocessor 8085.	
(b)	Calculate the Execution time required for the Instruction STA 3600H.	
(c)	Draw and Explain the Timing Diagram for execution of the Instruction LDA, 3200H.	
Q3. (10 X 2=20 Marks)		CO3
(a)	Determine the configurations of different ports of Intel 8251 Interface for control word C2.	
(b)	What is Direct Memory Access? Explain The Block Diagram of 8237 DMA controller.	
(c)	Draw and Explain the Block Diagram of the 8259 Programmable Interval controller.	
Q4. (10 X 2=20 Marks)		CO4
(a)	Write Assembly language program to swap five elements of memory location 2501H to 2505H and 2601H to 2605H.	
(b)	Explain the following Types of Instructions for Microprocessor 8085 with five examples each. i. Conditional Instructions. ii. Arithmetic Instructions. iii. shift Instructions.	
(c)	Write Assembly language program to Multiply two numbers stored in memory location 2500H and 2501H. Store result at 2600H.	
Q5. (10 X 2=20 Marks)		CO5

(a)	Draw and explain the Internal architecture of Intel 8051 Microcontroller.	
(b)	Explain the Different types of Registers of Intel 8051 Microcontroller.	
(c)	Discuss in detail the Interrupts of Microcontroller 8051.	