



**B.Tech V Semester Supplementary Examinations, July 2024**

**MICRO PROCESSORS AND MICRO CONTROLLERS  
(EEE)**

**Maximum Marks: 70**

Date:24.07.2024 Duration: 3 hours

- Note:
- 1.This question paper contains two parts A and B.
  2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

**Part-A**

All the following questions carry equal marks (10X2M=20 Marks)		CO	Bloom Tx
1	State the functional units available in 8086.	1	L1
2	List the features of 8086 microprocessor.	1	L1
3	What are the various interrupts in 8051 microcontroller?	2	L1
4	What are the advantages of microcontroller over microprocessor?	2	L1
5	What is need of USB?	3	L1
6	Write short notes on RAM and ROM.	3	L1
7	List any 3 features of ARM.	4	L1
8	List the pipelining stages of ARM7.	4	L1
9	Mention applications of CORTEX processor.	5	L1
10	What are the advantages of OMAP Processors?	5	L1

**Part-B**

Answer All the following questions. (5X10M=50Marks)			
11	Draw and explain the Pin diagram of 8086 and explain all signals. [10]	1	L2
OR			
12	List and explain different Arithmetic Instructions of 8086 microprocessor with neat examples. [10]	1	L2
13	Explain TCON & TMOD Register with a diagram in 8051 microcontrollers. [10]	2	L2
OR			
14	Describe Memory Organization of 8051 microcontroller neatly. [10]	2	L2
15	Write short notes on Serial Communication standards and Explain SPI BUS. [10]	3	L2
OR			
16	Explain Interfacing of D to A Converter with 8051 Microcontroller. [10]	3	L2
17	Write about the fundamentals of ARM Processor. [10]	4	L2

	OR		
18	Explain Branch Instructions of ARM Processor. [10]	4	L2
19	With a neat diagram, explain the Architecture of CORTEX Processor. [10]	5	L2
	OR		
20	a) Outline the Features of OMAP processor. [5] b) Explain applications of OMAP Processor in detail. [5]	5	L2