



R18 Regulation

Subject code:206EA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VI Semester Supplementary Examinations, December 2024

MICROPROCESSORS AND MICROCONTROLLERS (CSE)

Maximum Marks: 70

Date:30.12.2024

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	Write the Register addressing mode of 8086 microprocessor with two examples.	1	L1
2	What are the flags in 8086 microprocessor FLAG REGISTER?	1	L1
3	List the various interrupts supported by 8051 microcontroller.	2	L1
4	Define register.	2	L1
5	Explain the PSEN & EA signals in 8051.	3	L1
6	Write short notes on Asynchronous Serial data Transfer.	3	L1
7	List out different registers used in ARM Processor.	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)		CO	Bloom Tx
11	Explain the Architecture of 8086 Microprocessor with a neat sketch. [10M]	1	L2
OR			
12	List and Explain 8086 Microprocessor Data Transfer instructions with examples. [10M]	1	L2
13	With a neat diagram, describe the internal architecture of 8051 Microcontroller. [10M]	2	L2
OR			
14	Explain the following SFR's of 8051 micro controller in detail. a) TMOD [5M] b) TCON [5M]	2	L2
15	Write short notes on Serial Communication standards and Explain SPI BUS. [10M]	3	L2
OR			
16	Explain Interfacing of D to A Converter with 8051 Microcontroller. [10M]	3	L2
17	Draw ARM Programming Model and explain it. [10M]	4	L2

	OR		
18	What are the Features of ARM Processor? Explain Pipelining of ARM7 processor. [10M]	4	L2
19	Summarize the main features of CORTEX Processor and explain functional diagram of CORTEX. [10M]	5	L2
	OR		
20	Draw and explain the functional diagram of OMAP Processor. [10M]	5	L2