



MARRI LAXMAN REDDY

INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

II B.Tech I Sem Supply End Examination, October 2021

COMPUTER ORGANIZATION AND MICROPROCESSORS

(IT)

Time: 3 Hours.

Max. Marks: 70

Note: 1. Answer any FIVE questions.

2. Each question carries 14 marks and may have a, b as sub questions.

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|---|---|-----|-----|-----|
| 1 | a) Draw the block diagram of Digital Computer and explain all elements of it? | 7M | CO1 | BL4 |
| | b) Write about the operation of Micro Programmed Control unit with neat diagram? | 7M | CO1 | BL1 |
| 2 | Write about Instruction and Instruction code with examples? And also Explain Instruction Cycle and Memory reference instructions? | 14M | CO1 | BL4 |
| 3 | a) What is an addressing mode? Explain various addressing modes? | 7M | CO2 | BL1 |
| | b) Write about instruction set of 8086 with the instruction formats? | 7M | CO2 | BL1 |
| 4 | What is an Interrupt? Write about software and Hardware interrupts? Also Explain Interrupt Service Routines? | 14M | CO2 | BL4 |
| 5 | a) Explain all Special Function registers of the 8086 Processor with its architecture diagram? | 7M | CO3 | BL4 |
| | b) What is a Macro? Explain the role of it with suitable examples? | 7M | CO3 | BL4 |
| 6 | Explain Direct Memory Access with a diagram? | 14M | CO4 | BL4 |
| 7 | a) Explain Floating-point Arithmetic Operations? | 7M | CO4 | BL4 |
| | b) Write about pipelining in Parallel Processing? | 7M | CO5 | BL1 |
| 8 | Explain Auxiliary memory and Associate memory? | 14M | CO5 | BL4 |

