

Course Code: 1931213

Roll No:

MLRS- R19



# 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 Regular End Examination, March 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) What is an Instruction code? Explain with examples?   | 7M  | CO | BL |
|   | b) Explain Instruction Cycle and Memory reference instructions?  | 7M  | CO | BL |
| 2 | Describe the operation of Micro Programmed Control unit with neat diagram? Write the advantages of it? | 14M | CO | BL |
| 3 | a) Draw the 8086 Processor Architecture diagram? Explain all Special Function registers?               | 7M  | CO | BL |
|   | b) Define addressing mode? Write about various addressing modes?                                       | 7M  | CO | BL |
| 4 | What is an Interrupt? Explain various interrupts? Write about Interrupt Service Routines?              | 14M | CO | BL |
| 5 | a) Explain instruction set of 8086 with their instruction formats?                                     | 7M  | CO | BL |
|   | b) Define Macro? Explain the role of it with suitable examples?  | 7M  | CO | BL |
| 6 | Explain Floating-point Arithmetic Operations with examples?  | 14M | CO | BL |
| 7 | a) Write about DMA?  | 7M  | CO | BL |
|   | b) What is Associate memory? Explain?  | 7M  | CO | BL |
| 8 | Explain pipelining in Parallel Processing?   | 14M | CO | BL |

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