

Hall Ticket Number :

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R-19

Code: 19A461T

III B.Tech. II Semester Supplementary Examinations May / June 2024

Microprocessor & Interfacing
(Computer Science and Engineering)

Max. Marks: 70

Time: 3 Hours

Answer any five full questions by choosing one question from each unit (5x14 = 70 Marks)

Marks CO BL

UNIT-I

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|-----------|---|-----|-----|---|
| 1. | With the help of block diagram and timing diagrams explain the minimum mode of 8086 microprocessor. | 14M | CO1 | 2 |
| OR | | | | |
| 2. a) | Discuss the features of 8086. | 7M | CO1 | 2 |
| b) | Describe the flag register of 8086. | 7M | CO1 | 2 |

UNIT-II

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|-----------|---|-----|-----|---|
| 3. | Explain stepper Motor function and Write a program for stepper motor forward and backward rotation. | 14M | CO2 | 6 |
| OR | | | | |
| 4. a) | Justify latches and buffers used for interfacing | 6M | CO2 | 5 |
| b) | Describe the interfacing of D/A convertor with a neat sketch. | 8M | CO2 | 1 |

UNIT-III

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|-----------|--|-----|-----|---|
| 5. | With neat sketch explain the architecture of 8259A PIC | 14M | CO3 | 2 |
| OR | | | | |
| 6. | Draw the architecture of 8257.Explain about it. | 14M | CO2 | 2 |

UNIT-IV

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|-----------|---|-----|-----|---|
| 7. | Summarize each pin function of RS232 | 14M | CO2 | 2 |
| OR | | | | |
| 8. a) | Construct one sample program for serial data transmission. | 7M | CO2 | 3 |
| b) | Describe the Synchronous transmission and reception schemes of 8251 in detail | 7M | CO2 | 1 |

UNIT-V

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|-----------|---|-----|-----|---|
| 9. | Explain the salient features of 80386 | 14M | CO4 | 2 |
| OR | | | | |
| 10. | Draw the architecture of a Pentium processor, and list out some salient features of Pentium and Pentium pro processors. | 14M | CO4 | 1 |

Important Note: 1. On completing your answers. Compulsorily draw diagonal cross line on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg. 32+8=40, will be treated as malpractice.