



## III B.Tech I Sem Supply End Examination, December 2022

**Metrology and Machine Tools**  
 (Mechanical)

Time: 3 Hours.

Max. Marks: 70

Note: 1. Question paper consists: Part-A and Part-B.

2. In Part - A, answer all questions which carries 20 marks.

3. In Part - B, answer any one question from each unit.

Each question carries 10 marks and may have a, b as sub questions.

**PART- A****(10\*2 Marks = 20 Marks)**

- |       |  |    |     |     |
|-------|--|----|-----|-----|
| 1. a) | What is taper turning                        | 2M | C01 | BL1 |
| b)    | How do you specify lathe machine             | 2M | C01 | BL1 |
| c)    | What is drilling                             | 2M | C02 | BL1 |
| d)    | Give an example for multi point cutting tool | 2M | C02 | BL2 |
| e)    | What is the use of grinding wheel            | 2M | C03 | BL1 |
| f)    | List out types of indexing in milling        | 2M | C03 | BL2 |
| g)    | What is tolerance                            | 2M | C04 | BL1 |
| h)    | What is limit gauges                         | 2M | C04 | BL1 |
| i)    | Define surface finish                        | 2M | C05 | BL2 |
| j)    | What is the use of talysurf                  | 2M | C05 | BL1 |

**PART- B****(10\*5 Marks = 50 Marks)**

- |      |  |    |     |     |
|------|--|----|-----|-----|
| 2 a) | Sketch single point cutting tool show its nomenclature | 5M | C01 | BL2 |
| b)   | What is metal cutting and explain in general           | 5M | C01 | BL1 |

**OR**

- |      |  |    |     |     |
|------|--|----|-----|-----|
| 3 a) | List out types of metal cutting machines             | 5M | C01 | BL2 |
| b)   | Discuss on types of chips                            | 5M | C01 | BL2 |
| 4 a) | Explain radial Drilling operation with neat sketch   | 5M | C02 | BL2 |
| b)   | What is the function of slotting machine? explain it | 5M | C02 | BL2 |

**OR**

- |      |  |    |     |     |
|------|--|----|-----|-----|
| 5 a) | List out types of boring machines and its uses               | 5M | C02 | BL2 |
| b)   | What is the difference between drilling and boring operation | 5M | C02 | BL1 |

- |           |    |   |    |     |     |
|-----------|----|---|----|-----|-----|
| 6         | a) | List out types of milling machines and mention its parts      | 5M | C03 | BL1 |
|           | b) | What is honing and mention its advantages                     | 5M | C03 | BL1 |
| <b>OR</b> |    |   |    |     |     |
| 7         | a) | Explain broaching operation                                   | 5M | C03 | BL2 |
|           | b) | List out milling operations performed on work part            | 5M | C03 | BL1 |
| 8         | a) | Discuss types of fits   | 5M | C04 | BL3 |
|           | b) | What is interchangeability and explain it                     | 5M | C04 | BL1 |
| <b>OR</b> |    |   |    |     |     |
| 9         | a) | Explain hole and shaft basis system                           | 5M | C04 | BL2 |
|           | b) | What is the function of sine bar and explain with neat sketch | 5M | C04 | BL1 |
| 10        | a) | Discuss tool alignment tests on lathe machine                 | 5M | C05 | BL2 |
|           | b) | Define terms : i)waviness, ii) CLA                            | 5M | C05 | BL1 |
| <b>OR</b> |    |   |    |     |     |
| 11        | a) | Explain Screw thread measurement                              | 5M | C05 | BL2 |
|           | b) | What is the role of surface roughness in manufacturing        | 5M | C05 | BL1 |

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**CO - Course Outcome**

**BL - Blooms Taxonomy Levels**



# MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

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

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III B.Tech I Sem Supply End Examination, December 2022

## Computer Networks

(CSE)

Time: 3 Hours.

Max. Marks: 70

Note: 1. Question paper consists: Part-A and Part-B.

2. In Part - A, answer all questions which carries 20 marks.

3. In Part - B, answer any one question from each unit.

Each question carries 10 marks and may have a, b as sub questions.

### PART- A

(10\*2 Marks = 20 Marks)

- |       |  |    |     |     |
|-------|--|----|-----|-----|
| 1. a) | What are the types of twisted pair cable?  | 2M | C01 | BL1 |
| b)    | List the four levels of addressing employed in TCP/IP protocols.                 | 2M | C01 | BL2 |
| c)    | What is a sliding window protocol? Where is it used?                             | 2M | C02 | BL1 |
| d)    | How is error controlled in data link controlled protocol?                        | 2M | C02 | BL1 |
| e)    | What are the goals and characteristics of routing algorithms?                    | 2M | C03 | BL1 |
| f)    | Mention the limitations of Distance Vector and Shortest path routing algorithms. | 2M | C03 | BL2 |
| g)    | If UDP is so powerless, why would a process want to use it?                      | 2M | C04 | BL1 |
| h)    | Define TCP?  | 2M | C04 | BL1 |
| i)    | What is the purpose of DNS?  | 2M | C05 | BL1 |
| j)    | Write the e-mail services of application layer.                                  | 2M | C05 | BL1 |

### PART- B

(10\*5 Marks = 50 Marks)

- |      |  |    |     |     |
|------|--|----|-----|-----|
| 2 a) | List and explain the advantages of fiber optics over copper as a transmission medium.  | 5M | C01 | BL3 |
| b)   | In the TCP/IP protocol suite, what are the identical objects at the sender and the receiver sites when we think about the logical connection at the application layer? | 5M | C01 | BL2 |

OR

- |      |  |     |     |     |
|------|--|-----|-----|-----|
| 3    | Make a comparison between the TCP/IP and OSI Models.   | 10M | C01 | BL4 |
| 4 a) | List and explain the data link layer design issues.  | 5M  | C02 | BL3 |
| b)   | Consider the delay of pure ALOHA versus slotted ALOHA at low load. Which one is less? Explain your answer. | 5M  | C02 | BL2 |

OR



5	Explain sliding window protocol using Go back n and using selective repeat.	10M	CO2	BL4
6	a) List and explain the elements of transport protocols.	5M	CO3	BL3
	b) Discuss the congestion control in virtual circuit subnets.	5M	CO3	BL4
<b>OR</b>				
7	With an example explain the Flooding, Hierarchical routing algorithms used in computer networks.	10M	CO3	BL4
8	a) List and explain Transport Services	5M	CO4	BL3
	b) The following is a dump of a UDP header in hexadecimal format. CB84000D001C001C, what is the source port number?	5M	CO4	BL2
<b>OR</b>				
9	Compare and contrast the two TCP/IP transport protocols: TCP and UDP, in terms of de multiplexing, reliability and flow control	10M	CO4	BL4
10	a) Discuss the e-mail architecture and services.	5M	CO5	BL3
	b) Explain DNS with reference to its components and working.	5M	CO5	BL2
<b>OR</b>				
11	Write a short note on the following: a) World WEB b) HTTP	10M	CO5	BL2

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**CO - Course Outcome**

**BL - Blooms Taxonomy Levels**