

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech II Year II Semester Supplementary Examinations May/June-2024

MANUFACTURING TECHNOLOGY

(Mechanical Engineering)

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

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|---|---|--|-----|----|----|
| 1 | a | Explain the various properties of moulding sand. | CO1 | L1 | 6M |
| | b | Describe any three types of casting defects. | CO1 | L2 | 6M |

OR

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|---|---|---|-----|----|----|
| 2 | a | With neat sketch explain shell moulding process. | CO1 | L1 | 6M |
| | b | With neat sketch explain centrifugal casting process. | CO1 | L2 | 6M |

UNIT-II

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|---|---|--|-----|----|----|
| 3 | a | Write short note on Heat Affected Zone (HAZ) in welding. | CO2 | L1 | 6M |
| | b | Explain the working of oxy acetylene gas welding. | CO2 | L2 | 6M |

OR

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|---|---|--|-----|----|----|
| 4 | a | Write short notes on submerged arc welding and write its applications. | CO2 | L1 | 6M |
| | b | Differentiate between the welding, brazing and soldering processes. | CO2 | L2 | 6M |

UNIT-III

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|---|---|---|-----|----|----|
| 5 | a | Write short notes on (i) Hot working process (ii) Cold working process. | CO3 | L1 | 6M |
| | b | What are the characteristics of rolling processes. | CO3 | L2 | 6M |

OR

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|---|---|---|-----|----|----|
| 6 | a | With suitable illustration describe wire drawing processes. | CO3 | L1 | 6M |
| | b | With suitable illustration describe extrusion processes. | CO3 | L2 | 6M |

UNIT-IV

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|---|---|---|-----|----|----|
| 7 | a | Explain the stretch forming operations also state its applications. | CO4 | L1 | 6M |
| | b | Explain the magnetic pulse forming operations. | CO4 | L2 | 6M |

OR

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|---|---|---|-----|----|----|
| 8 | a | With suitable illustration explain the deep drawing operations. | CO4 | L1 | 6M |
| | b | Write notes on micro forming Operations. | CO4 | L2 | 6M |

UNIT-V

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|---|---|--|-----|----|----|
| 9 | a | With suitable illustration explain the injection moulding process. | CO5 | L1 | 6M |
| | b | With suitable illustration explain the transfer moulding process. | CO5 | L2 | 6M |

OR

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|----|---|---|-----|----|----|
| 10 | a | With suitable illustration explain the blow moulding process. | CO5 | L1 | 6M |
| | b | With suitable illustration explain the rotational moulding process. | CO5 | L2 | 6M |

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