

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

B.Tech II Year II Semester Regular & Supplementary Examinations August-2023
MANUFACTURING PROCESSES

(Mechanical Engineering)

Time: 3 Hours

Max. Marks: 60

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

UNIT-I

- | | | | | |
|---|---|-----|----|----|
| 1 | a Sketch the cross section of a sand mould which is ready for pouring, and label the various important parts. | CO1 | L3 | 6M |
| | b Briefly explain the procedure to be followed for making a sand mould. | CO1 | L2 | 6M |

OR

- | | | | | |
|---|--|-----|----|-----|
| 2 | With neat sketch explain shell moulding process. | CO1 | L2 | 12M |
|---|--|-----|----|-----|

UNIT-II

- | | | | | |
|---|--|-----|----|----|
| 3 | a Compare TIG and MIG welding processes. | CO2 | L2 | 6M |
| | b Explain the classification of welding processes briefly. | CO2 | L2 | 6M |

OR

- | | | | | |
|---|---|-----|----|----|
| 4 | a Identify the common welding troubles; causes and remedies in welding Process. | CO2 | L3 | 6M |
| | b What is weld decay and how it can be prevented? | CO2 | L1 | 6M |

UNIT-III

- | | | | | |
|---|--|-----|----|----|
| 5 | a Discuss the different types of rolling mills with a neat sketch. | CO3 | L2 | 6M |
| | b Write the advantages and disadvantages of rolling processes. | CO3 | L2 | 6M |

OR

- | | | | | |
|---|---|-----|----|----|
| 6 | a Distinguish roll forging and rotary forging. | CO4 | L4 | 6M |
| | b List out various advantages and disadvantages of forging process. | CO4 | L2 | 6M |

UNIT-IV

- | | | | | |
|---|--|-----|----|----|
| 7 | a Explain the Stretch forming operations & its applications. | CO4 | L2 | 6M |
| | b Write the Formability of sheet metal characteristics | CO4 | L3 | 6M |

OR

- | | | | | |
|---|-----------------|-----|----|-----|
| 8 | Write note on | CO4 | L2 | 12M |
| | i) sintering | | | |
| | ii) compacting. | | | |

UNIT-V

- | | | | | |
|---|---|-----|----|----|
| 9 | a Explain the structure of thermo plastic and thermosetting plastics. | CO5 | L2 | 6M |
| | b Explain the polymerization briefly. | CO5 | L2 | 6M |

OR

- | | | | | |
|----|------------------------|-----|----|-----|
| 10 | Write note on | CO6 | L2 | 12M |
| | i) Film blowing | | | |
| | ii) Extrusion process. | | | |

*** END ***

