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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech II Year II Semester Supplementary Examinations February 2022
MANUFACTURING PROCESSES
(Mechanical Engineering)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

- 1 a List the main advantages and applications of the casting process. **6M**
 b What are the major limitations of the sand casting process and how are they overcome? **6M**

OR

- 2 a Name the pattern allowances provided on the pattern for sand casting and state the reasons why they are provided. **6M**
 b What are the requirements of good moulding sand? **6M**

UNIT-II

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

OR

- 4 With neat sketch explain Electron Beam Welding. Give its advantages and disadvantages. **12M**

UNIT-III

- 5 a Discuss the principle of extrusion process. **6M**
 b Differentiate the hot and cold extrusion processes. **6M**

OR

- 6 a Discuss about super plastic forming. **6M**
 b Give the advantages, disadvantages and applications of micro forming process **6M**

UNIT-IV

- 7 What is Metal spinning? Explain with neat sketch. **12M**

OR

- 8 a Explain bending operations with suitable sketches. **6M**
 b Sketch & explain the Drawing operation **6M**

UNIT-V

- 9 Explain the working principles and application of Injection Moulding **12M**

OR

- 10 a Explain the various methods of Bonding of Thermoplastics. **6M**
 b Differentiate thermo plastics and thermo settings. **6M**

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