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

B.Tech II Year II Semester Regular Examinations October-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. **L1 6M**
b What are the major limitations of the sand casting process and how are they overcome? **L2 6M**

OR

- 2 a Distinguish clearly between the following: moulding sand, backing sand and facing sand. **L2 6M**
b Define pattern. Name the different types of patterns and pattern materials. **L1 6M**

UNIT-II

- 3 a Explain the working of oxy acetylene gas welding. **L2 6M**
b Distinguish three types of welding flames and for what applications these are used. **L4 6M**

OR

- 4 a Illustrate the working principle of spot welding. **L2 6M**
b Write short notes on : **L2 6M**
i) Seam welding ii) Projection welding

UNIT-III

- 5 a Name various types of forgings. **L1 6M**
b What are the characteristics of forging processes? Write Processes used. **L2 6M**

OR

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

UNIT-IV

- 7 a Discuss about the advantages, disadvantages and applications of sheet metal processes. **L4 6M**
b Differentiate the formability and spinning process. **L2 6M**

OR

- 8 a What are the characteristics of sheet metal. **L1 6M**
b What are the various types of shearing operations. **L1 6M**

UNIT-V

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

OR

- 10 a Explain the various methods of Bonding of Thermoplastics. **L2 6M**
b Differentiate thermo plastics and thermo settings. **L3 6M**

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