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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

PART-A

(Answer all the Questions 5 x 2 = 10 Marks)

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| 1 | <p>a State any four types of patterns. 2M</p> <p>b What is the purpose of flux? 2M</p> <p>c What is the impact of extrusion? 2M</p> <p>d What is wire drawing? 2M</p> <p>e What is the punching operation? 2M</p> |
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PART-B

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

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| 2 | <p>a Describe CO₂ process. 5M</p> <p>b Describe defects in casting. 5M</p> |
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OR

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| 3 | <p>a What is gate ratio? What is the difference between green sand and dry sand? 5M</p> <p>b Explain the various properties of moulding sand. 5M</p> |
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UNIT-II

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| 4 | <p>a Difference between TIG and MIG welding process. 5M</p> <p>b What is Heat Affected zone. Explain briefly. 5M</p> |
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| 5 | <p>a Explain submerged arc welding process. 5M</p> <p>b What are different applications welding process? 5M</p> |
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UNIT-III

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| 6 | <p>a Explain hot working process with an example, its process used. 5M</p> <p>b Explain cold working process with an example, its process used. 5M</p> |
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| 7 | <p>a What are the advantages of rolling process? 6M</p> <p>b What is the shape of rolling process? 4M</p> |
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UNIT-IV

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| 8 | <p>a What are the types shearing? 6M</p> <p>b What are the characteristics of sheet metal? 4M</p> |
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| 9 | <p>a Explain the bending operations with suitable sketch. 5M</p> <p>b Sketch and explain the drawing operation. 5M</p> |
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UNIT-V

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| 10 | <p>a Explain the polymerization briefly. 5M</p> <p>b What is the difference between thermo and thermosetting plastics? 5M</p> |
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OR

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| 11 | <p>a What are the foamed plastics and state show foaming is done? 5M</p> <p>b Explain briefly about calendaring with neat sketch. 5M</p> |
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END