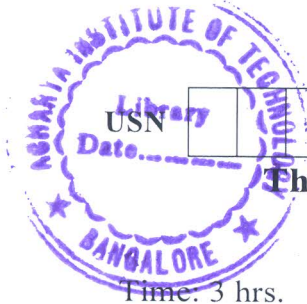


CBGS SCHEME



17AU36

Third Semester B.E. Degree Examination, June/July 2019 Manufacturing Process - I

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Define Casting. Explain various steps involved in making casting. (10 Marks)
b. Explain various allowance given to pattern and reasons to provide the allowance. (10 Marks)

OR

- 2 a. Explain with sketch, the working principle of Jolt type moulding machine. (10 Marks)
b. Analyse various patterns. Explain any four of them. (10 Marks)

Module-2

- 3 a. Explain briefly with sketches : i) CO₂ moulding ii) Shell moulding. (10 Marks)
b. Explain with diagram oil fired crucible furnace. (10 Marks)

OR

- 4 a. Explain briefly with sketches : i) Centrifuging ii) Squeeze casting. (10 Marks)
b. Describe with sketch, the working principle of Cupola furnace. (10 Marks)

Module-3

- 5 a. Explain with MIG welding. Describe merits, limitation and application. (10 Marks)
b. Discuss the types of frames obtained in oxyacetylene gas welding process give their application. (10 Marks)

OR

- 6 a. Explain with sketch, the process of Atomic, Hydrogen welding. (10 Marks)
b. Describe forward and backward welding process. (10 Marks)

Module-4

- 7 a. Explain with sketch the process of thermit welding and its application. (10 Marks)
b. Explain in detail with sketch, the explosive welding process and its merits. (10 Marks)

OR

- 8 a. Explain with sketch, the Laser beam welding process. Write merits, limitation and application. (10 Marks)
b. Explain with sketch the seam welding process. Write its merits, limitations and application. (10 Marks)

Module-5

- 9 a. Explain briefly welding defects, causes and remedies. (10 Marks)
b. Explain with sketch, the structure of weld. (10 Marks)

OR

- 10 a. Explain in detail the Technique of Magnetic particles inspection. (10 Marks)
b. Analyse between the following :
i) Welding and soldering ii) Soldering and Brazing. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.