



CBCS SCHEME

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Third Semester B.E. Degree Examination, Jan./Feb. 2023 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. With a flow chart discuss the steps involved in casting process. (10 Marks)
b. Describe the various materials used for pattern. (10 Marks)

OR

- 2 a. Discuss the various requirements of base sand. (10 Marks)
b. Explain with neat sketch the various casting defects. (10 Marks)

Module-2

- 3 a. With a neat sketch explain Jolt and squeeze type moulding machine. (10 Marks)
b. Describe the process of investment mould with suitable figure. (10 Marks)

OR

- 4 a. With a neat sketch explain the working of centrifugal casting. (10 Marks)
b. With a neat sketch, explain the constructional features of electric arc furnace. (10 Marks)

Module-3

- 5 a. With a neat sketch, explain the working of metal arc welding. (10 Marks)
b. Discuss the advantages, disadvantages and applications of welding process. (10 Marks)

OR

- 6 a. Explain with neat sketch the working of oxy-Acetylene welding. (10 Marks)
b. Explain with relevant figure the working of submerged arc welding. (10 Marks)

Module-4

- 7 a. With appropriate figure describe the constructional features of seam welding. (10 Marks)
b. Describe the working of electron beam welding with appropriate sketch. (10 Marks)

OR

- 8 a. Discuss the parameters affecting Heat Affected Zones (HAZ). (10 Marks)
b. Describe with neat sketch the various welding defects. (10 Marks)

Module-5

- 9 a. Discuss the different types of soldering. (10 Marks)
b. Explain the various parameters involved in brazing. (10 Marks)

OR

- 10 a. Discuss with neat sketch ultrasonic inspection for determining the defects in welding and casting. (10 Marks)
b. Describe the holography method of inspection for determining the defects in welding and casting. (10 Marks)
