

CBCS SCHEME

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21MR32

Third Semester B.E. Degree Examination, Jan./Feb. 2023 Manufacturing Processes

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. List the different types of moulding process and explain sand moulding process with a neat sketch. (10 Marks)
b. Make a comparison between shell moulding and plaster moulding. (10 Marks)

OR

- 2 a. Make a comparison between green sand and skin dried sand moulding. (10 Marks)
b. Describe working of coreless induction furnace, with neat sketch. (10 Marks)

Module-2

- 3 a. Explain electron beam welding with a neat sketch. (10 Marks)
b. With a neat sketch, explain spot welding. (10 Marks)

OR

- 4 a. Distinguish between radiography and holography inspection with sketch. (10 Marks)
b. Show and explain heat affected zone in weld joint. (10 Marks)

Module-3

- 5 a. Draw a neat diagram of capstan lathe and label the part. (10 Marks)
b. Explain drilling and boring operation with neat sketch and list the applications. (10 Marks)

OR

- 6 a. List the different types of lathe operation and explain any four with neat sketch. (10 Marks)
b. Explain milling principle with neat sketch and also explain indexing in milling. (10 Marks)

Module-4

- 7 a. Distinguish between traditional and non-traditional machining process. (10 Marks)
b. Explain Laser Beam Machining with neat sketch. Write advantages and applications. (10 Marks)

OR

- 8 a. Explain Honing and Lapping process with neat sketch. (10 Marks)
b. Enlist the requirement that demands the use of advanced manufacturing process. (10 Marks)

Module-5

- 9 a. Explain rolling process with a neat sketch. (10 Marks)
b. What is rapid prototyping? How it is useful in industry? (10 Marks)

OR

- 10 a. Explain tube and wire drawing with neat sketch. (10 Marks)
b. Explain blanking and piercing operation with a neat sketch. (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.