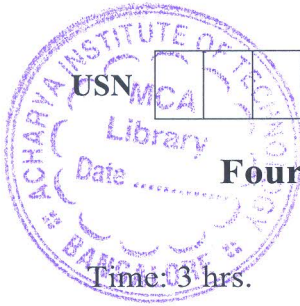


CBCS SCHEME



18MT44

Fourth Semester B.E. Degree Examination, June/July 2023 Manufacturing Technology

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Explain the classification of manufacturing processes. (10 Marks)
- b. Define Costing. Briefly explain the sand costing process. (10 Marks)

OR

- 2 a. With a neat sketch, explain cope and drag pattern and match plate pattern. (10 Marks)
- b. Explain the properties of moulding sand. (05 Marks)
- c. Explain the requirements of core sand. (05 Marks)

Module-2

- 3 a. Explain the classification of metal working process. (10 Marks)
- b. Define Forging. Explain any 2 forging operations. (10 Marks)

OR

- 4 a. With a neat sketch, explain two high rolling mills and cluster mill. (10 Marks)
- b. With a neat sketch explain Rod drawing process. (10 Marks)

Module-3

- 5 a. Explain any two methods of extrusion process. (10 Marks)
- b. With a neat sketch, explain progressive dies. (10 Marks)

OR

- 6 a. Define welding process. Explain the advantages and disadvantages of welding process. (10 Marks)
- b. With a neat sketch, explain flux shielded metal arc welding process. (10 Marks)

Module-4

- 7 a. Briefly explain the principles of non-traditional processes. (10 Marks)
- b. Briefly explain with a neat sketch the arrangement and working principle of ultrasonic machining process. (10 Marks)

OR

- 8 a. Briefly explain the process of Abrasive Jet Machining process. (10 Marks)
- b. Explain the advantages, limitations and applications of electro-chemical process. (10 Marks)

Module-5

- 9 a. Explain the basic components of CNC machine tool. (10 Marks)
- b. Explain the configuration of CNC machine control unit. (10 Marks)

OR

- 10 a. List and explain four types of CNC machining centres. (10 Marks)
- b. Explain the advantages, disadvantages and application areas of CNC. (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.