



Fifth Semester B.E. Degree Examination, June/July 2023
Non-Traditional Machining

Max. Marks: 100

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

Module-1

- 1 a. Explain the classification of modern machining process. (10 Marks)
- b. Explain in detail the process selection in NTM process. (10 Marks)

OR

- 2 a. Explain the need of development of NTM process. (10 Marks)
- b. Differentiate between traditional and Non-traditional machining process. (10 Marks)

Module-2

- 3 a. With a neat sketch explain the WJM process. (10 Marks)
- b. Explain the elements of USM process. (10 Marks)

OR

- 4 a. With neat sketch, explain the principle and process details of AJM process. (12 Marks)
- b. List the advantages and applications of WJM process. (08 Marks)

Module-3

- 5 a. Explain with a neat sketch ECM process. (12 Marks)
- b. Discuss the electrolyte flow arrangement in ECM process. (08 Marks)

OR

- 6 a. Briefly explain the applications of ECM process. (10 Marks)
- b. Explain the principle and working details of CM process. (10 Marks)

Module-4

- 7 a. With neat sketch, explain working principle of EDM process. (10 Marks)
- b. Briefly explain the essential requirement of dielectric fluid. (10 Marks)

OR

- 8 a. With neat sketch, explain electrode feed control in EDM process. (10 Marks)
- b. With a neat sketch, explain plasma arc machining. (10 Marks)

Module-5

- 9 a. Explain with neat sketch the working principle of LBM process. (12 Marks)
- b. List out the advantages, disadvantages and application of LBM. (08 Marks)

OR

- 10 a. With a neat sketch the generation and control of electron beam. (12 Marks)
- b. List out the advantages, disadvantages and applications of EBM. (08 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.

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