



# CBCS SCHEME

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## Fourth Semester B.E. Degree Examination, June/July 2023 Manufacturing Process - II

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 neat sketch explain the Nomenclature of single point cutting tool. (10 Marks)  
b. With suitable figure explain the various types of tool wear. (10 Marks)

OR

- 2 a. Explain in detail the properties of cutting fluids. (10 Marks)  
b. With a neat sketch discuss the heat generation in metal cutting. (10 Marks)

### Module-2

- 3 a. With relevant sketch. Explain the constructional features of Capstan and Turret Lathe. (10 Marks)  
b. Discuss in detail the Classification of Lathe. (10 Marks)

OR

- 4 a. Discuss with neat sketch the Construction and working shaping machine. (10 Marks)  
b. Classify the planning machine. Discuss any 2 with suitable figure. (10 Marks)

### Module-3

- 5 a. Explain the constructional features of milling machines with suitable figure. (10 Marks)  
b. Explain any 3 milling operations with relevant sketch. (10 Marks)

OR

- 6 a. Discuss with neat sketch the Constructional features of Centre – less grinding machine. (10 Marks)  
b. Explain in detail the Grinding process parameters. (10 Marks)

### Module-4

- 7 a. With a suitable figure, Discuss the Constructional features of Radial drilling machine. (10 Marks)  
b. With suitable figure, Explain the twist drill nomenclature. (10 Marks)

OR

- 8 a. Explain in detail the various methods of lapping with relevant sketch. (10 Marks)  
b. Discuss the Constructional features of honing machine with suitable figure. Also list the advantages and limitations. (10 Marks)

### Module-5

- 9 a. With suitable figure discuss the construction and working of Laser Beam Machining. (10 Marks)  
b. Discuss the construction and working of water jet machining. Also list the applications. (10 Marks)

OR

- 10 a. Explain the construction and working of Ultrasonic machining. List the applications of USM. (10 Marks)  
b. Explain the construction and working of Electro Chemical Machining. (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.