

CBCS SCHEME

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18IM36

Third Semester B.E. Degree Examination, Feb./Mar. 2022 Manufacturing Process

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Mention the manufacturing process and explain. (10 Marks)
b. Mention and explain the steps involved in making a casting. (10 Marks)

OR

- 2 a. Mention the allowances for pattern to produce a casting and explain why allowances are provided to pattern. (10 Marks)
b. Mention the types of binders and additives used in moulding sand. (10 Marks)

Module-2

- 3 a. Mention and explain the principles of gating system. (08 Marks)
b. Mention the types of gates with neat sketches. (12 Marks)

OR

- 4 a. Explain hot chamber die casting process with neat sketch. (10 Marks)
b. With neat sketch explain slush casting. (10 Marks)

Module-3

- 5 a. Explain forging operations with neat diagram. (10 Marks)
b. Explain direct extrusion with neat sketch. (10 Marks)

OR

- 6 a. Explain single point cutting tool nomenclature with neat diagram. (10 Marks)
b. Explain the forms of tool wear. (10 Marks)

Module-4

- 7 a. Explain saddle type turret lathe with neat sketch. (10 Marks)
b. Explain horizontal spindle column and knee milling machine with neat sketch. (10 Marks)

OR

- 8 a. Explain with neat diagram of milling cutter nomenclature. (10 Marks)
b. Mention and explain milling operations. (10 Marks)

Module-5

- 9 a. Explain the three basic components of NC system. (10 Marks)
b. Explain a CNC system with general configuration. (10 Marks)

OR

- 10 a. Mention the basic components of an FMS and explain any one. (10 Marks)
b. Mention and explain FMS benefits. (10 Marks)

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