

CBCS Scheme

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15AU46

Fourth Semester B.E. Degree Examination, June/July 2018 Manufacturing Process - II

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. Explain with a neat sketch the nomenclature of single point cutting tool stating the significance of different angles. (10 Marks)
b. State different types of tool wear and list the effects of cutting parameters on tool life. (06 Marks)

OR

- 2 a. List and explain the desired properties of cutting tool materials. (06 Marks)
b. Explain factors affecting heat generation during cutting. (04 Marks)
c. List and explain briefly any one measurement of tool tip temperature. (06 Marks)

Module-2

- 3 a. Explain with a neat sketch, different operations performed on a lathe machine. (12 Marks)
b. Explain features of turret and capstan lathe. (04 Marks)

OR

- 4 a. Explain with a neat sketch, the drive mechanism of shaping machine. (08 Marks)
b. Draw a neat labeled diagram for planning machine and name mechanism for quick return movement in a planner. (08 Marks)

Module-3

- 5 a. With a neat sketch, differentiate between up milling and down milling. (08 Marks)
b. Index 48 divisions on a work piece using simple indexing. (04 Marks)
c. What is Indexing? Explain simple, compound and angular indexing. (04 Marks)

OR

- 6 a. Explain centre less, cylindrical and surface grinding. (09 Marks)
b. What are Abrasives? State the functions of abrasives and explain grain size and bonding process. (07 Marks)

Module-4

- 7 a. Define the term drilling. Explain types of drilling and drill bit nomenclature. (11 Marks)
b. What is Broaching? State its advantages and disadvantages. (05 Marks)

OR

- 8 a. Explain Finishing process. State advantages and disadvantages. (08 Marks)
b. Explain super finishing and polishing. (08 Marks)

Module-5

- 9 a. State reasons for requirements of NTM. (06 Marks)
b. Explain with a neat sketch, the USM operation. (10 Marks)

OR

- 10 a. Explain with a neat sketch, water jet machining. (08 Marks)
b. State advantages and disadvantages of EDM and PAM process. (04 Marks)
c. Explain Chemical machining. (04 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.