

Roll No

ME-8003 (3) (CBGS)**B.E. VIII Semester**

Examination, May 2019

Choice Based Grading System (CBGS)**Advance Machining Process***Time : Three Hours**Maximum Marks : 70*

- Note:* i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) What are the different Advance Machining Process and what are their advantages? 6
b) Explain the water jet machining process. 8
2. a) What are the recent development in mechanical processes? 6
b) Differentiate the ultrasonic machining and abrasive jet machining. 8
3. a) What are the factors that control surface finish in machining process. How do you select the cutting process parameters for finish turning? 6
b) Explain in detail the Electrochemical Machining Process. 8
4. a) Explain the use of power source and electrolytes in 'ECM'. 6
b) Write short note on Electrochemical deburring. 8

5. a) What are the advantages of Electric Discharge Machining (EDM)? 6
b) What are the different thermal metal removal processes? Explain any one in detail. 8
6. a) Explain the working of Plasma Arc Machining (PAM). 6
b) Differentiate the Electron Beam Machining (EBM) and Laser Beam Machining (LBM). 8
7. a) Explain the principles and working of 3D printing. 6
b) What are the advantages and disadvantages of subtractive v/s additive manufacturing process? 8
8. a) What are the different micro system devices? 6
b) Explain the different Nano Fabrication Processes. 8

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