

Roll No.

Total Pages : 03

July-22-00343

B. Tech EXAMINATION, 2022

Semester VI (CBCS)

MODERN MANUFACTURING PROCESSES

ME-608

Time : 3 Hours

Maximum Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt *Five* questions in all, selecting *one* question from each Section A, B, C and D. Q. No. 9 is compulsory.

Section A

1. Explain Ultrasonic machining with neat and clean diagram and also mention its merits and demerits. **10**
2. Differentiate between modern manufacturing processes and conventional manufacturing processes with suitable examples. **10**

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Section B

3. Explain the working of abrasive jet machining with neat diagram and also mention its merits and demerits. 10
4. Explain the working of Electrochemical machining with neat diagram along with its advantages. 10

Section C

5. Explain constructions, working and principle of EDM with neat and clean diagram. 10
6. Explain constructions, working and principle of Laser beam machining with neat and clean diagram along with its merits, demerits and applications. 10

Section D

7. Explain mechanism of metal removal in plasma arc Machining with suitable example. 10
8. Discuss process capabilities and limitations of electron beam machining. 10

(Compulsory Question)

9. Short answer type questions : 4×5=20
 - (a) Discuss economic consideration of ultrasonic machining.
 - (b) Define Metal removal rate.
 - (c) Define the applications of dielectric fluid.
 - (d) Define Machining accuracy.
 - (e) Discuss applications of plasma jet.