

Dec.-22-0248

ME-608 (Modern Manufacturing Process)

B.Tech. 6th (CBCS)

Time : 3 Hours

Max. 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 each from sections A, B, C and D of the paper and all sub-parts of the Question 9 of section E is compulsory.

**SECTION - A**

1. What is modern manufacturing? Classify Modern manufacturing processes with suitable applications. (10)
2. Explain the working of water jet machining with neat and clean diagram. (10)

**SECTION - B**

3. Explain the working of electro chemical grinding with neat diagram. (10)
4. Explain the parameters required for selection of electrode material with suitable example. (10)

**SECTION - C**

5. Explain the metallurgical effects of laser beam machining with suitable example. (10)
6. Explain constructions, working and principle of plasma arc machining with neat and clean diagram along with its merits, demerits and applications. (10)

**SECTION - D**

7. Explain constructions, working and principle of electron beam machining with neat and clean diagram along with its applications. (10)
8. Discuss the process required for tool electrode design with suitable example. (10)

**SECTION - E  
(Compulsory Question)**

9. Short Answer type questions.
  - (a) Discuss theory of electronic beam machining.
  - (b) Define surface finish and accuracy.
  - (c) Define the applications of wire cut EDM.
  - (d) Discuss PAM parameters.
  - (e) Discuss applications of electrochemical grinding. (5×4=20)