

Roll No.

Total Pages : 03

BT-7/D-13

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ADVANCED MANUFACTURING TECHNOLOGY

ME-419-E

Time : Three Hours]

[Maximum Marks : 100

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Explain the process of 'Electroforming' in brief. Also discuss some of its advantages and applications.
(b) What are the various types of 'Surface Treatments' ? Discuss paint coating and slushing also.
2. (a) Describe the process of fabrication of CMC and MMC composites ?
(b) Discuss special methods employed for the machining, cutting and joining operations of composites.

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Unit II

3. Write short notes on the following plastic processing methods :
 - (a) Injection Moulding
 - (b) Compression Moulding.
4. (a) Describe the following thread manufacturing methods :
 - (i) Casting
 - (ii) Thread Chasing.
(b) Define the term 'Thread Rolling'. Also discuss the process of thread measurement and inspection.

Unit III

5. Describe various theories of yielding in metal working processes. Also describe in brief effect of various variables on Metal Working Processes.
6. Write short notes on the following :
 - (a) Extrusion
 - (b) Rolling.

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Unit IV

7. Explain with neat sketch the working of Hot Chamber and Cold Chamber die casting machines.
8. What are the various elements of cost of a product and how these are estimated ? Discuss in detail.