

**SUBJECT CODE NO: E-8028**  
**FACULTY OF ENGINEERING AND TECHNOLOGY**  
**M.E. (Mechanical) Examination Nov/Dec 2017**  
**Advanced Manufacturing Techniques**  
**(Revised)**

[Time: Three Hours]

[Max.Marks:80]

Please check whether you have got the right question paper.

- N.B 1. Q.No.1 from section A and Q.No.5 from section B are compulsory.  
 2. Solve any two questions from Q.No.2 to Q.No.4 in Sec-A and any two questions from Q.No.6 to Q.No.8 Sec-B.

**Section -A**

- Q.1 Solve any three questions of the following. 18  
 a. Explain Flask Less Moulding.  
 b. What do you understand by Rapid prototype patterns?  
 c. With specific example explain the precision grinding.  
 d. Comment on Tool Chip Interface Friction.
- Q.2 a. What do you mean by web based collaboration? 06  
 b. Discuss in detail uniformity in casting and moulding. 05
- Q.3 a. What do you mean by Benchmarking of RP and T Routes for casting application? 06  
 b. Enlist various types of Tool Wear and explain any one. 05
- Q.4 a. With specific example explain the surface finish operation. 06  
 b. Comment on Heat Generation during Metal Cutting Process. 05

**Section -B**

- Q.5 Solve any three questions of the following. 18  
 a. Discuss the significance of Non-Traditional Manufacturing Process compared to traditional process.  
 b. Explain Magneto Abrasive Finishing Process in detail.  
 c. Explain with neat sketch compression Molding Process and state its application.  
 d. Enlist the products formed by injection moulding and explain any one in detail.
- Q.6 a. Explain Electro Stream Drilling with specific example. 06  
 b. With specific example explain the areas of Application for Thermal Spray Coating. 05
- Q.7 a. Explain in detail importance and principle application of chemical vapour deposition. 06  
 b. What do you mean by structural foam molding? 05
- Q.8 a. Enlist suitable application of Thermo Forming process and explain in detail. 06  
 b. Suggest a suitable process for microdrilling Holes in Thin Sheets and explain in detail. 05