

Roll No. ....

Total Pages : 02

**BT-7/M-20**

**37175**

**ADVANCED MANUFACTURING**

**TECHNOLOGY**

**ME-429N, Opt. I**

Time : Three Hours]

[Maximum Marks : 75

**Note :** There are eight questions in this paper. Attempt *Five* questions in all, selecting at least *one* question from each Section. All questions carry 15 mark.

**Section A**

1. (a) Write a technical note on surface coatings, paint coating and slushing. 7½
- (b) Explain in detail cutting and joining of composites. Also discuss fabrication of laminates. 7½
2. (a) Write the various types of composite materials. Also discuss fabricate of particulate composite materials. 8
- (b) Discuss in detail surface coating for tooling and graphite mould coating. 7

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**Section B**

3. (a) Write the various types of plastics. Also discuss in detail properties of plastics. **8**  
(b) Write short notes on thread rolling, die threading and tapping. **7**
4. Explain in detail Injection moulding. Also discuss in detail machining and casting of plastics. **15**

**Section C**

5. Explain in detail Open die forging and power rolling. Also discuss drawing and extrusion with regards to metal forming. **15**
6. (a) Classify metal forming processes. Explain the effect of variables on metal forming processes. **10**  
(b) Write a technical note on hot working. **5**

**Section D**

7. Explain in detail die casting machines. Also describe in brief molten metal injection systems and hot chamber machines. **15**
8. (a) What are the various steps in making cost estimate? Also write the chief factors in cost estimating. **10**  
(b) Write short note on cold chamber machines and die casting design. **5**

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