

**24169**

**B.Tech. (ME) 4th Semester F-Scheme  
Examination, May-2019  
MANUFACTURING TECHNOLOGY-I  
Paper-ME-202-F**

*Time allowed : 3 hours]*

*[Maximum marks : 100*

*Note : Question No. 1 is compulsory. Students have to attempt five questions in total, at least one question from each section.*

1. (a) What is tooling economics ? 5
- (b) What is milling fixtures ? 5
- (c) What is fettling ? 5
- (d) What is soldering ? 5

**Section-A**

2. (a) What are different tool material ? 10
- (b) Discuss the mechanics of chip formation. 10
3. (a) What is machinery economics and optimization ? 10
- (b) What are different metal cutting theories ? 10

**Section-B**

4. (a) Explain the theories of plasticity in detail. 10
- (b) Discuss the various types of screw gauge. 10

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5. Explain the following : 20
- (a) Auto-Collimator
  - (b) Rolling theory

**Section-C**

6. (a) What are various basic steps in casting process ? 10
- (b) Explain the constructional features of shaper machine in detail. 10
7. Explain the following : 20
- (a) Inspection and quality control
  - (b) Lathe machine

**Section-D**

8. Define the welding. Explain any *three* welding process in detail. 20
9. What is the basic principle of Hot & Cold working ? Explain any *three* process in detail. 20

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