

**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

- 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