

Roll No. ....

## OLE-3209

**B. Tech. 5th Semester (ME)**

**Examination – April, 2021**

**MANUFACTURING TECHNOLOGY-I**

**Paper : PCC-ME-305-G**

*Time : Three Hours ]*

*[ Maximum Marks : 75*

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Question No. 1 is *compulsory*. Students have to attempt at least *one* question from each Unit.

1. Write short notes on followings : 15
- (i) Tooling economics
  - (ii) Economics of jigs and mixture
  - (iii) Surface finish
  - (iv) Shaper and planer
  - (v) Bending and joining
  - (vi) Welding defects

## **UNIT – I**

2. Explain different types of chips and its mechanics of formation.
3. Discuss Taylor's life equation for tool life.

## **UNIT – II**

4. Explain the theories of plasticity and also discuss conditions of plane strains.
5. Explain principles of locations and also discuss about locating and clamping devices.

## **UNIT – III**

6. Define pattern and its types with its allowances.
7. How the inspection and Quality control of casting is carried out? Explain.

## **UNIT – IV**

8. Differentiate b/W TIG and MIG.
  9. Explain wire drawing mechanism with mathematical expressions.
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