

Roll No. ....

**3013**

**B. Tech. 1st Semester  
(Common for All Branches)  
Examination – December, 2018**

**WORKSHOP TECHNOLOGY**

**Paper : ESC-ME-102-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 :*** Attempt any *five* questions in all, selecting *one* question from each Unit. Question No. 1 is *compulsory*. All questions carry equal marks.

**1. Explain the following :** **2.5 × 6**

- (a) What do you mean by manufacturing process ?
- (b) Advantages of plant lay-out.
- (c) Name any *four* fitting tools.
- (d) Principle of arc welding.

- (e) Principle of resistance weldings.
- (f) GMAW.

### **UNIT – I**

- 2. Explain the concept of plant layout and It's Importance also enlist types of plant lay-out. 15
- 3. Explain the concept of accident and common sources of accident. How can overcome from this ? 15

### **UNIT – II**

- 4. Describe the principle of hot working process and cold working process with the help of suitable diagram. 15
- 5. Explain the classification of metals also explain the various fitting operations. 15

### **UNIT – III**

- 6. Enlist the various casting process. Also explain the various sand casting properties. 15
- 7. Explain the principle of lathe machine, also tell various parts of lathe machine with the help of neat sketch. 15

## UNIT – IV

8. Describe the principle of Arc Welding also explain TIG welding and It's application with the help of neat sketch and example. 15
  9. Explain the working principle of resistance welding. Also explain the different types of welding defects. 15
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