

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