

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (OLD) EXAMINATION – WINTER 2018****Subject Code:161907****Date: 04/12/2018****Subject Name: Industrial Engineering****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Discuss the factors to be considered for the selection of the site for Thermal Power plant. **07**
- (b) Define plant lay out. discuss following types of plant layout **07**
- (1) Process layout
- (2) Group technology
- (3) Fixed position layout
- Q.2** (a) Describe Exponential Smoothing method of sales forecasting. States its advantages and limitations. **07**
- (b) Explain in brief the following : **07**
- i) Flow diagram ii) Two-hand process chart
- OR**
- (b) Explain the functions of production planning and control. **07**
- Q.3** (a) What is the term productivity? State various ways to improve productivity. Explain any one of them with suitable example. **07**
- (b) List the various Therbligs with their symbols. Explain applications of micro motion study. **07**
- OR**
- Q.3** (a) State the objectives of work measurement. Name the work measurement techniques. **07**
- (b) What is job evaluation? Discuss any one method of job evaluation. **07**
- Q.4** (a) Explain the following: **07**
- (i) The workmen's Compensation Act, 1923
- (ii) The Factory Act, 1948
- (b) Explain (1) quality assurance (2) quality and inspection (3) T. Q. M. **07**
- OR**
- Q.4** (a) Write short note on single and multiple sampling plans. **07**
- (b) What is entrepreneur and entrepreneurship? State the factors influencing entrepreneurship. **07**
- Q.5** (a) What is an OC curve? Explain the step-by-step procedure for the construction of an OC curve. **07**
- (b) Define wages. Explain in brief various types of incentives. **07**
- OR**
- Q.5** (a) Distinguish between job evaluation and merit rating. Discuss its importance and objectives. **07**
- (b) What is industrial dispute? Discuss the process of resolving the industrial disputes through the Industrial Dispute Act. **07**
