

GUJARAT TECHNOLOGICAL UNIVERSITY**PDDC-Semester –VI (May-2012) Examination****Subject code: X61904****Subject Name: Industrial Engineering****Date: 11/05/2012****Time: 10.30 am – 01.00 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 Station. **07**
- (b)** Discuss in detail the objectives of good plant layout. **07**

- Q.2 (a)** Explain the method of least squares used for sales forecasting. **07**
- (b)** What is process planning? Discuss the factors influencing process planning. **07**

OR

- (b)** Explain the role of PPC in manufacturing industry. **07**

- Q.3 (a)** Why does the problem of line balancing arise? Discuss the steps for solving the line balancing problem. **07**
- (b)** Which factors should be considered by the design engineer in the design and development of the product? **07**

OR

- Q.3 (a)** Discuss factors affecting 'Productivity' and state how it can be improved. **07**
- (b)** Incentives are necessary for the smooth and the efficient running of the manufacturing organization. – Discuss giving suitable example. **07**

- Q.4 (a)** Discuss the factors to be kept in mind for carrying out the method study. **07**
- (b)** What is Work Measurement? Discuss the principal techniques by which the work measurement is carried out. **07**

OR

- Q.4 (a)** Why is it necessary to apply rating to the actual time which an operator takes to perform an operation? How is standard time for a job made up? **07**
- (b)** Why is the job broken down into elements during time study? **07**

- Q.5 (a)** What is the industrial dispute? Discuss the process of resolving industrial disputes through the Industrial Dispute Act. **07**
- (b)** What is the purpose of control charts? Explain how this purpose is achieved in manufacturing? **07**

OR

- Q.5 (a)** State the important objectives of Quality Control. Which duties are generally assigned to the Quality Control Department? **07**
- (b)** Discuss the different sources of industrial finance. Discuss the incentives which the Government offer to the entrepreneur. **07**