

GUJARAT TECHNOLOGICAL UNIVERSITY**BE SEM-VI Examination-Nov/Dec-2011****Subject code: 161907****Date: 05/12/2011****Subject Name: Industrial Engineering****Time: 10.30 am -1.00 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) Discuss the types of Plant Layout. **07**

Q.2 (a) Discuss the different sources for industrial finance. **07**

(b) Incentives are necessary for smooth and the efficient running of the manufacturing organization. – Discuss giving suitable example. **07**

OR

(b) What is industrial dispute? Discuss the process of resolving the industrial disputes through the Industrial Dispute Act. **07**

Q.3 (a) The sale of drilling machines during the last six years is as under. Forecast the sales in the year 2012 using suitable method. **07**

Year	2006	2007	2008	2009	2010	2011
Units Sold	10	15	19	22	24	25

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

OR

Q.3 (a) Which factors should be considered by the design engineer in the design and development of the product? **07**

(b) Effective production planning and control guarantees better utilization of the available resources. – Discuss giving suitable example. **07**

Q.4 (a) What is Productivity? Discuss the factors affecting the productivity of the manufacturing organization. **07**

(b) Discuss the following: **07**

(i) Ineffective time within the control of the worker.

(ii) Ineffective time due to shortcomings on the part of management.

OR

Q.4 (a) Discuss the following: **07**

(i) Work Study and Management.

(ii) Work Study and the Worker.

(b) Define Method Study. Discuss the objectives of method study. **07**

Q.5 (a) State the important objectives of Quality Control. Which duties are generally assigned to the Quality Control Department? **07**

- (b) What is the purpose of control charts? Explain how this purpose is achieved in manufacturing? 07

OR

- Q.5 (a) What is an OC curve? Explain the step-by-step procedure for the construction of an OC curve. 07
- (b) The following data shows the number of defects found in the inspection of 10 wooden chairs. 07

Sample No.	1	2	3	4	5	6	7	8	9	10
No. of Defects	8	6	7	7	8	6	9	8	4	7

Plot a suitable control chart with control limits.
