

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VIII(OLD) • EXAMINATION – WINTER 2017****Subject Code:182504****Date:18/11/2017****Subject Name: Facilities Planning****Time:02.30 TO 05.00****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) What is facility planning? Explain the general procedure with flow chart for designing layout using CRAFT. **07**
 (b) Define depreciation. Explain reasons of replacement of equipment with suitable examples. **07**
- Q.2** (a) Explain the features of general purpose material handling equipments. **07**
 (b) Explain present worth method for replacement analysis. **07**
- OR**
- (b) Write a short note on Just- In- Time manufacturing. **07**
- Q.3** (a) Which factors should be considered for location decision of plant? Elaborate your answer. **07**
 (b) Write the characteristics of product and process type of layouts. **07**
- OR**
- Q.3** (a) Differentiate between fixed position and group technology type of layouts. **07**
 (b) Write a short note on flexible manufacturing system. **07**
- Q.4** (a) Which are the specific factors that affect the rural and urban location of plant? **07**
 (b) What are the functions of material handling system? **07**
- OR**
- Q.4** (a) What is activity relationship? How does this parameter affect the layout design? **07**
 (b) Which are the main causes and sources of accidents in the plant? What should be taken care to prevent them? **07**
- Q.5** (a) Write a brief note on material flow systems. **07**
 (b) Write a brief note on industrial act and safety. **07**
- OR**
- Q.5** (a) Productivity goes with safety- Justify. **07**
 (b) Explain the minimum wage act. **07**
