

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV • EXAMINATION – WINTER 2013****Subject Code: 141501****Date: 30-12-2013****Subject Name: Productivity 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 how does material handling methods depend on the nature of the product and the quantity of manufacture ? Give Examples. **07**
(b) Discuss briefly how the material handling engineer tries to achieve the objectives. **07**
- Q.2** (a) Enumerate the guiding principles of material handling. **07**
(b) 'Material handling analysis, plant layout and plant building forms a composite study'. - Justify **07**
- OR**
- (b) Distinguish fully between the product and process layout of a shop. **07**
- Q.3** (a) Discuss different principles of plant layout in the industry. **07**
(b) What are the limitations in designing a layout ? **07**
- OR**
- Q.3** (a) What are the possible advantages of scientific layout ? **07**
(b) Discuss various stages of method study. **07**
- Q.4** (a) Explain the importance of standardization of method before taking time study **07**
(b) How will you proceed to train workers in proposed method ? **07**
- OR**
- Q.4** (a) What are the differences between operation process chart and flow process chart? **07**
(b) Explain human aspect of work study. **07**
- Q.5** (a) What is standard time ? Describe briefly how will you calculate 'standard time' from the observed time obtained by time study. **07**
(b) What is the difference between 'production' and 'productivity'? **07**
- OR**
- Q.5** (a) Explain the different techniques to improve productivity. **07**
(b) Explain 'Value Engineering'. What are its advantages ? **07**
