

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV • EXAMINATION – WINTER • 2014

Subject Code: 141501**Date: 02-01-2015****Subject Name: Productivity Engineering****Time: 02:30 pm - 05:30 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)** What is the importance of productivity? Mention various factors which affect productivity. **07**
- (b)** How the productivity can be increased? What are the reasons for low productivity? **07**
- Q.2 (a)** State the principles of motion economy. **07**
- (b)** Define 'Method study'. Explain in detail the various steps involved in systematic methods of improvement. **07**
- OR**
- (b)** How will you be ensured that improved methods have been properly installed? **07**
- Q.3 (a)** Make a left hand and right hand operation chart for filling a fountain pen. **07**
- (b)** Write note on 'string diagram'. **07**
- OR**
- Q.3 (a)** Write note on Cycle graph. **07**
- (b)** Explain the human aspects of work study. **07**
- Q.4 (a)** Explain various types of allowances in time study. **07**
- (b)** Explain work sampling. **07**
- OR**
- Q.4 (a)** Distinguish fully between the product are process layout of a shop. **07**
- (b)** Discuss the different principles of plant layout in industry. **07**
- Q.5 (a)** Discuss the dynamic nature of the layout. **07**
- (b)** Define value engineering. What are its advantages? **07**
- OR**
- Q.5 (a)** Discuss the factors affecting the selection of materials handling equipment in a production shop. **07**
- (b)** Define the objectives and functions of production planning. **07**
