Seat No.: _____ Enrolment No._____

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**

****