GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER– VII (New) EXAMINATION – WINTER 2019

Subject Code: 2172502   **Date: 23/11/2019**

Subject Name: Productivity Improvement Methods

Time: 10:30 AM TO 01:00 PM   **Total Marks: 70**

Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

			MARKS
Q.1	**(a)**	Differentiate production and productivity in light of economic progress of India. Take an example of ship breaking industries.	**03**
	(b)	Define flow process chart. Explain types of flow process chart.	**04**
	(c)	Define method study. Take an example of a manufacturing industry, and discuss economic, technical and human factors' consideration in selection of a job for study.	**07**
Q.2	**(a)**	Write a brief note on construction of a SIMO chart.	**03**
	(b)	Write a brief note on Therbligs and PMTS.	**04**
	(c)	Discuss implementation methodology of BPR. Take a suitable example.	**07**
		OR	
	(c)	Discuss various causes of low productivity. Explain factors that help increasing productivity.	**07**
Q.3	**(a)**	Explain performance rating.	**03**
	(b)	Explain human behavior and equipment design in concern with ergonomics.	**04**
	(c)	Write a detail note on motion economy.	**07**
		OR	
Q.3	**(a)**	Discuss why it is considered crucial to know as to 'when to reengineer''.	**03**
	(b)	Discuss effect of environment on performance of worker, with suitable illustration	**04**
	(c)	Discuss development of BPR. Write steps involved in BPR.	**07**
Q.4	**(a)**	Define outline process chart.	**03**
	(b)	List methods of work measurement.	**04**
	(c)	Explain string diagram for productivity improvement.	**07**
		OR	
Q.4	**(a)**	Define standard time.	**03**
	(b)	Write a brief note on allowances.	**04**
	(c)	Explain man-machine chart in detail.	**07**
Q.5	**(a)**	Enlist time estimating techniques.	**03**
	(b)	Prepare a two handed process chart for filling ink in a fountain pen.	**04**
	(c)	Write a note on Contemporary issues in productivity.	**07**
		OR	
Q.5	**(a)**	What is NPC?	**03**
	(b)	Discuss various incentive schemes followed by organization.	**04**
	(c)	Explain various methods used to determine the basic time required to perform any operation from time study record	**07**

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