Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VIII (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2182502 **Date: 02/05/2017**

Subject Name: Recent Advances in Manufacturing

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.**

Q.1	**(a)**	Define value analysis. Give concept and objective of value analysis. Discuss few important advantages of value analysis in keeping view to present manufacturing industries.	**07**
	(b)	Define ERP. Discuss different ERP modules and explain procedure used in industries for implementation of ERP system.	**07**
Q.2	**(a)**	Enlist types of industries used ERP system. Discuss about requirements of various hardware and software for successfully implementation of ERP.	**07**
	(b)	Discuss role of management information system. Explain information value and measurements of information value for decision making.	**07**
		OR	
	(b)	Explain information flow network. Discuss design and development of information flow network for recent MIS system.	**07**
Q.3	**(a)**	Define supply chain managements. Discuss role of supply chain management and also explain optimization of transport network.	**07**
	(b)	Discuss about different types of supply chain models used in various industries and enterprises in India.	**07**
		OR	
Q.3	**(a)**	Write a note on E-manufacturing and E-commerce, considered as a time demanding tools.	**07**
	(b)	Discuss about Japanese approach for productivity improvements. Explain concept of JIT in detail.	**07**
Q.4	**(a)**	Explain KANBAN system in detail.	**07**
	(b)	Write a note on SMED and POKAYOKE techniques used for manufacturing improvements.	**07**
		OR	
Q.4	**(a)**	What you mean by 5S? Discuss objective of 5S. Explain procedure for implementation of 5S in industries.	**07**
	(b)	Write a detail note on JIDOKA techniques.	**07**
Q.5	**(a)**	Write a note on role of ERP in productivity improvements.	**07**
	(b)	When to apply value analysis? Give difference between value analysis and value engineering.	**07**
		OR	
Q.5	**(a)**	Explain concept of value engineering. Discuss various techniques for value engineering.	**07**
	(b)	Discuss various techniques and test for value analysis.	**07**

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