Seat No.: _____   Enrolment No._____

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

Subject Code: 2180207   **Date:** 21/11/2019

Subject Name: Applied Industrial Engineering In Automobile

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)**	Define Production, Planning and Control.	**03**
	(b)	Elaborate Sales Forecasting with suitable example.	**04**
	(c)	Explain significance of Pareto analysis Diagram with a neat sketch.	**07**
Q.2	**(a)**	Define Productivity. Enlist factors affecting productivity.	**03**
	(b)	Describe about Flow process Chart with a neat diagram.	**04**
	(c)	Elaborate "Therbligs" with its symbol and application.	**07**
		OR	
	(c)	Describe about Man-machine Chart and Multiple activity chart with its industrial applications.	**07**
Q.3	**(a)**	Define Quality in terms of three Quality Gurus.	**03**
	(b)	Explain Histogram in terms of Quality solving tools.	**04**
	(c)	Illustrate "Ishikawa Diagram" in context to automobile industries.	**07**
		OR	
Q.3	**(a)**	Explain 5's Techniques with reference to quality.	**03**
	(b)	Describe about Quality Circle in terms of Human dimensions of Quality.	**04**
	(c)	Elaborate Six sigma programs towards zero defects.	**07**
Q.4	**(a)**	Define : Reliability and Mean Time To Failure (MTTF)	**03**
	(b)	Explain Bathtub Curve in terms of Reliability engineering.	**04**
	(c)	Illustrate Failure Mode & Effect Analysis – FMEA	**07**
		OR	
Q.4	**(a)**	Explain Just in Time manufacturing.	**03**
	(b)	Explain Supply Chain Management and Logistics	**04**
	(c)	Describe Operating Characteristics - OC curves in terms of acceptance sampling.	**07**
Q.5	**(a)**	Explain Economic Order Quantity (EOQ) models.	**03**
	(b)	Explain about Tender Methods of Purchasing system.	**04**
	(c)	Write short note on "Operation Research"	**07**
		OR	
Q.5	**(a)**	Define: (1) PERT. (2) CPM. (3) Linear Programming.	**03**
	(b)	Illustrate North west corner method with suitable example.	**04**
	(c)	Write short note of ISO: 9000 and ISO:14000	**07**

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