## **GUJARAT TECHNOLOGICAL UNIVERSITY**

		BE - SEMESTER-VI (OLD) - EXAMINATION – SUMMER 2017	
Subject Code: 162501 Date: 10/05			)17
Subject Name: Statistical Methods and Quality ControlTime: 10:30 AM to 01:00 PMTotal Marks:			70
Ins	tructi 1. 2. 3. 4.	ions: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. Use of statistical table is permissible	
Q.1	(a) (b)	Explain methods of collection of data in detail with suitable example What do you mean by arithmetic, harmonic and geometric mean? Explain with suitable example	07 07
Q.2	(a)	Find out mean and standard deviation of following ungrouped data 15 19 20 16 18 09 25 24 21 19 17 26 32 14 15 24 36 20 18 35 14 25 24 18 06 17 19 22 27 19	07
	<b>(b)</b>	Explain skeness and kurtosis with neat sketch OR	07
	<b>(b</b> )	Explain median and mode with suitable example	07
Q.3	(a) (b)	Describe bye's theorem with case example What do you mean by binomial distribution? Explain with suitable example <b>OR</b>	07 07
Q.3	(a) (b)	Describe properties of poisons distribution Which are the continuous probability distributions? Explain normal distribution with suitable example	07 07
Q.4	(a)	What is regression? How it is useful in forecasting? Explain with a case problem	07
	<b>(b</b> )	Discuss type I and type II error in testing of hypothesis OR	07
Q.4	(a) (b)	Explain auto correlation in detail Describe any 3 case methods of testing of hypothesis	07 07
Q.5	(a) (b)	Describe chi square method in detail Describe p and np chart with suitable example	07 07
Q.5	(a) (b)	Describe double sampling methods with suitable example Explain OC curve in detail	07 07

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