



ASSIGNMENT

DRIVE	SPRING 2014
PROGRAM	MBADS/ MBAFLEX/ MBAHCSN3/ MBAN2/ PGDBAN2
SEMESTER	I
SUBJECT CODE & NAME	MB0040 STATISTICS FOR MANAGEMENT
BK ID	B1731
CREDITS	4
MARKS	60

Note: Answer all questions. Kindly note that answers for 10 marks questions should be approximately of 400 words. Each question is followed by evaluation scheme.

Q.No	Questions	Marks	Total Marks
1	A statistical survey is a scientific process of collection and analysis of numerical data. Explain the stages of statistical survey. Describe the various methods for collecting data in a statistical survey.		
	Meaning of statistical survey	2	10
	Stages of statistical survey (Listing and Explanation)	5	
	Methods for collecting data	3	
2	a) Explain the approaches to define probability. b) In a bolt factory machines A, B, C manufacture 25, 35 and 40 percent of the total output. Of their total output 5, 4 and 2 percent are defective respectively. A bolt is drawn at random and is found to be defective. What are the probabilities that it was manufactured by machines A, B and C?		
	a) Explanation of the approaches to define probability	5	10
	b) Applying Bayes theorem and calculating the probabilities	5	
3	a) The procedure of testing hypothesis requires a researcher to adopt several steps. Describe in brief all such steps. b) A sample of 400 items is taken from a normal population whose mean as well as variance is 4. If the sample mean is 4.5, can the sample be regarded as a truly random		

	sample?																				
	a) Hypothesis testing procedure	5	10																		
	b) Calculation and solution to the problem	5																			
4	a) What is a Chi-square test? Point out its applications. Under what conditions is this test applicable? b) What are the components of time series? Enumerate the methods of determining trend in time series.																				
	a) Meaning, applications and conditions	4	10																		
	b) Components of time series and methods of determining trend in time series	6																			
5	What do you mean by cost of living index? Discuss the methods of construction of cost of living index with an example for each.																				
	Meaning of cost of living index	2	10																		
	Methods of constructing cost of living index with an example for each	8																			
6	a) What is analysis of variance? What are the assumptions of this technique? b) Three samples below have been obtained from normal populations with equal variances. Test the hypothesis at 5% level that the population means are equal.																				
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	[The table value of F at 5% level of significance for $v_1 = 2$ and $v_2 = 12$ is 3.88]																				
	a) Meaning and Assumptions	3	10																		
	b) Formulas/Calculation/Solution to the problem	7																			

