

End Semester Examinations - 2015-16 MBA Trimester - May 2016

14MS3004 Business Statistics

Set A

Time : 3 hrs
Total Marks: 100

1. Elucidate the importance of statistics for business

OR

- 2.

Delta is a leading marketing research firm in India. A client in Delta is interested in the probable relationship between telephone and Television purchase of a particular region. The company prepared a single question. “ Do you have a telephone and / or a television in your home” and conducted a survey on 75 persons. The results obtained from this survey are given below

	Television			
		Yes	No	Total
	Yes	20	15	35
	No	30	10	40
	Total	50	25	75

Test if the purchase of telephones is independent of that of televisions

3. A) The following Table lists the number of three whellers produced in India from January 2008 to July 2008. On the basis of the given data , construct a Histogram

Month	Jan	Feb	Mar	Apr	May	June	July
Production	41999	41055	35942	37346	38003	39137	41151

- B) What are the benefits of constructing a Pareto Chart?

OR

4. A) The weekly earnings of 187 employees of a company is given in the below Table. Find the mean of the weekly earnings

Weekly earnings	100	120	140	160	180	200	210
Number of employees	5	8	12	16	22	44	80

- B) Find the arithmetic mean for the below data

0-10	10-20	20-30	30-40	40-50	50-60	60-70
5	7	19	12	5	2	7

5. Find the standard deviation for the given raw data set

110, 117, 129, 300, 357, 100, 500, 630, 750

OR

6. A) State the addition rule of probability and the multiplication rule of probability

B) from a well shuffled pack of 52 cards, a card is taken in random. Find the probability that it is an Ace or a Heart

7. Using suitable examples, explain the various scales of measurement

OR

8. A) What are the various types of Random Sampling methods

B) What are the various types of Non Random Sampling methods

9. **COMPULSORY QUESTION**

A placement company has conducted a written test to recruit people in a software company. Assume that the test marks are normally distributed with a mean of 120 and standard deviation of 50. Find the following

A) Probability of randomly obtaining scores greater than 200 in the test

B) Probability of randomly obtaining a score that is 180 or less

C) Probability of randomly obtaining a score less than 80

D) Probability of randomly selecting a score between 70 and 170 for the test

Wishing you All the Best
