

**MASTER OF BUSINESS ADMINISTRATION
EVERONN (MBAEV)**

Term-End Examination

June, 2016

00397

MCN-038 : QUANTITATIVE TECHNIQUES

Time : 3 hours

Maximum Marks : 100

Note : Attempt any five questions. All questions carry equal marks.

1. (a) Statistical analysis of a representative group of consumers can provide a reasonably accurate, cost-effective snapshot of the market with faster and cheaper statistics than attempting a census of very single customer a company may ever deal with. Elucidate the above statement.
- (b) What are the Law of 'Statistical Regularity' and the Law of 'Inertia of Large Numbers'? 20

2. Calculate the standard deviation and its coefficient from the following data :

20

<i>Wages in ₹</i>	<i>No. of Persons</i>
48 and above	5
40 and above	15
32 – 40	20
16 – 32	45
8 – 24	32
Less than 16	20
Less than 8	8

3. (a) What do you mean by Dispersion ? Give the meaning of Absolute Measure and Relative Measure with examples.
- (b) Write a note on the Editing of Primary Data and Secondary Data for the purpose of Analysis and Interpretation.
4. (a) Give examples of two variables that are positively correlated and negatively correlated. Suggest the suitable method for finding the correlation coefficient for each pair.

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- (b) A researcher wished to determine if a person's age is related to the number of hours he or she exercises per week. The data obtained from a sample is given. State your opinion based on Karl Pearson's coefficient of correlation for the data.

<i>Age x</i>	<i>Hours y</i>
18	10
26	5
32	2
38	3
52	1.5
59	1

20

5. Distinguish between any **two** of the following : $2 \times 10 = 20$

- (a) Continuous and Discrete Series
- (b) Qualitative and Quantitative Variables
- (c) Skewness and Kurtosis

6. (a) How many types of Series are there on the basis of Quantitative Classification ? Give the difference between Exclusive and Inclusive Series.

- (b) What do you mean by quartiles ? How does it differ from percentile ? Explain with the help of a suitable example. $10 + 10 = 20$

7. Briefly comment on any *two* of the following : $2 \times 10 = 20$

- (a) An index number is an economic data figure reflecting price.
- (b) Business statistics has grown with the art of constructing charts and tables.
- (c) Mathematics arises from many different kinds of problems.

8. Write short notes on any *two* of the following : $2 \times 10 = 20$

- (a) ANOVA Test
 - (b) Stratified Samples
 - (c) Statistics in Management Decision Making
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