

## PAT-010-004708 Seat No.

## Fourth Year B.H.T.M. (Sem. VII) (CBCS) Examination

October / November - 2018

7.6. E.3 Business Statistics

(New Course)

Faculty Code: 010 Subject Code: 004708

Time: 3 Hours [Total Marks: 70

**Instructions :** (i) Question No. 1 is compulsory. Attempt any four questions from Question No. 2 to 7.

- (ii) Simple non-programmable calculators are allowed.
- (iii) The maximum marks are assigned in front of each question.

## 1 Do as directed:

7+7=14

[ Contd...

- (a) Define the following terms. Indicate the formula wherever 7 applicable.
  - (i) Mean
  - (ii) Median
  - (iii) Inferential Statistics
  - (iv) Range
  - (v) Variable
  - (vi) Quartile
  - (vii) Primary Data
- (b) State the truth validity of the following statements as True/False. Rectify the false statement.
  - (i) The inferential statistical procedures are valid for both random and nonrandom samples.
  - (ii) Histograms are used with numeric data rather than with categorical data.
  - (iii) Adding or subtracting a constant to or from each score does not affect the value of the standard deviation.

- (iv) In a normal distribution : the mean, median, and the mode have different values.
- (v) In the negative relationship as the independent variable decreases, the dependent variable also decreases.
- (vi) A basic characteristic of a simple random sample is that each case has an equal chance of being selected.
- (vii) If Kurtosis is more than 3, then the data is platykurtic.
- 2 State weather there is any correlation between demand for wheat and its price from the following data.

Demand	Price		
400	12		
470	15		
510	16		
560	17		
620	20		
600	19		
480	19		
490	20		
520	25		
550	27		

3 Calculate quartiles and coefficient of quartile deviation of the 14 following series.

Marks	Students			
0-10	4			
10 - 20	8			
20-30	11			
30-40	15			
40-50	12			
50-60	6			
60 - 70	3			

4 Calculate mean, standard deviation and variance.

Class	20-30	30-40	40-50	50-60	60 - 70	70-80
Frequency	5	15	0	22	11	7

- 5 What is interview method? Explain different types of interview methods?
- 6 Explain various types of statistical series? Write a note on various statistical averages.
- What are the techniques and advantages of statistical quality 14 control?

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