No. of Printed Pages : 5 BACHELOR OF BUSINESS ADMINISTRATION (SERVICES MANAGEMENT) (BBASM) GEREMENT (BBASM) December, 2021 BSM-008 : BASIC QUANTITATIVE TECHNIQUES

 $\it Note: Attempt \ all \ questions.$

- Answer all the questions. Each question carries 1 mark.
 - (a) Statistics does not study characteristics.
 - (b) Statistics considers
 - (i) A set of items
 - (ii) A single item

(iii) Either a single item or a set of items

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- (iv) Neither a single item nor a set of items
- (c) State True or False :

Census report is an economical tool to collect data in comparison to sampling.

- (d) means separating items
 according to similar characteristics and
 grouping them into various classes.
- (e) The geometric mean of 3, 12 and 48 is :
 - (i) 14 units
 - (ii) 12 units
 - (iii) 13 units
 - (iv) 15 units
- (f) State True or False :

In a 'normal distribution' the mean, median and mode have similar values.

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(g) State True or False :

Analysis of variance is a statistical method of comparing the standard deviations of several populations.

- (h)is arrived at by discounting all future cash inflows to present value using opportunity cost as the discount rate and deducting the initial investment.
- (i) State True or False :

Demand forecasting is convenient for capital goods.

(j) State True or False :

At BEP, there is no profit, no loss to the firm.

- Answer any *five* of the following questions in about 100 words each. Each question carries 2 marks.
 - (a) Discuss the limitations of statistics.
 - (b) What are the different types of data ?

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(c) Discuss the objectives of Classification.

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- (d) What are the *two* limitations of diagrammatic representation of data ?
- (e) List the advantages of Geometric Mean.
- (f) What do you mean by skewness ?
- (g) What is meant by sample space ?
- (h) What do you understand by normal distribution ?
- Answer any *four* of the following questions in about 250 words each. Each question carries 5 marks.
 - (a) Discuss characteristics of a good questionnaire.
 - (b) From the collection point of view, data are of two types : primary and secondary. Differentiate between them.
 - (c) Find the HM of 3, 6, 12 and 14.

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- (d) Discuss Odds in favour of and Odds against an event.
- (e) Calculate the S. D. and coefficient of variation from the following data :

12, 15, 10, 8, 11, 13, 18, 14, 9

- (f) Discuss various theorems of probability.
- 4. Answer any *one* question in **500** words : 10
 - (a) What do you understand by normal distribution ? Also discuss the properties of normal distribution.
 - (b) The cost of an asset is ₹ 5,00,000, the estimated life of the asset is 10 years and the net residual value is ₹ 1,00,000.
 Calculate per year depreciation and the rate of depreciation.