

**BACHELOR OF BUSINESS ADMINISTRATION
(SERVICES MANAGEMENT)
(BBASM)**

Term-End Examination

June, 2022

BSM-008 : BASIC QUANTITATIVE TECHNIQUES

Time : 2 hours

Maximum Marks : 50

Note : Attempt *all* questions.

1. Answer *all* the questions. Each question carries 1 mark.

(a) Fill in the blanks : *5×1=5*

(i) Statistics is used in two senses : singular and _____.

(ii) Quantitative data are called variables, and qualitative data are called _____.

(iii) The minimum and maximum values in each class interval are known as _____.

(iv) There are three different types of mean, namely arithmetic mean (AM), geometric mean (GM) and _____.

(v) Calculate the range from the data given below :

120, 140, 150, 165, 175, 200, 250, 275, 300

(b) State whether the following statements are True or False : $5 \times 1 = 5$

(i) The concept of standard deviation was introduced by the renowned statistician Karl Pearson.

(ii) Skewness is a measure of the degree of asymmetry of a distribution.

(iii) Increase in value of fixed assets is 'depreciation'.

(iv) If a customer pays ₹ 200 for a product that costs ₹ 170 to make and sell, the company earns a profit of ₹ 30.

(v) Questionnaire is a tool to collect secondary data.

2. Briefly explain any **five** of the following in about 100 words each : 5×2=10

- (a) Primary Data
- (b) Histogram
- (c) Mean
- (d) Dispersion
- (e) Probability
- (f) Chi-square (χ^2) Distribution
- (g) Compound Interest
- (h) Break-Even Analysis

3. Answer any **four** of the following in about 250 words each : 4×5=20

- (a) Distinguish between Census and Sample survey.
- (b) Briefly explain the various types of tabulation.
- (c) What is a Median ? Explain.
- (d) What are the characteristics of a good questionnaire ?
- (e) What is Standard Normal Distribution ?
- (f) List the methods of demand forecasting.

4. Answer any **one** of the following questions in about 500 words : $1 \times 10 = 10$

(a) Mr. A has deposited ₹ 6,000 in a Savings Account. Bank pays interest at a rate of 9% per year. Compute the amount of interest that will be earned over a 5-year period :

(i) If the interest is simple

(ii) If the interest is compounded annually

(b) Explain Skewness. How is Positively skewed distribution different from Negatively skewed distribution ?
