

TILAK MAHARASHTRA VIDYAPEETH, PUNE
BACHELOR OF BUSINESS ADMINISTRATION (B.B.A.) (071)
EXAMINATION: DECEMBER – 2025

SEMESTER - IV

Sub.: Statistics and Quantitative Methods/Statistical and Quantitative Methods

(BBA22-412/BBA23-412)

Date : 27/12/2025

Total Marks : 60

Time: 2.00 pm to 4.30pm

- Instructions:** 1) All questions are compulsory.
 2) Figures to the right indicate full marks.

Q. 1. Choose the most appropriate option. (05)

1. Statistics is mainly concerned with_____
 - a) Individuals
 - b) Aggregates of facts
 - c) Personal opinions
 - d) Stories
2. Qualitative data refers to _____
 - a) Numerical data
 - b) Descriptive data
 - c) Financial data
 - d) Secondary data
3. The arithmetic mean of 5, 10, 15 is _____
 - a) 5
 - b) 10
 - c) 15
 - d) 12
4. Median is the _____
 - a) Middle value
 - b) Largest value
 - c) Smallest value
 - d) Weighted average
5. Range is calculated as _____
 - a) $Q_3 - Q_1$
 - b) Mean – Median
 - c) Largest value – smallest value
 - d) σ^2

Q. 2. State True / False (05)

1. Statistics deals with individual facts.
 - a) True
 - b) False
2. Primary data are collected directly from field.
 - a) True
 - b) False
3. Median is not affected by extreme values.
 - a) True
 - b) False
4. Standard deviation is the square of variance.
 - a) True
 - b) False
5. Mean deviation is always negative.
 - a) True
 - b) False

Q. 3. Write Short notes on (Any Three) (15)

1. Use of Statistics in Business
2. Primary and Secondary Data
3. Arithmetic Mean

4. Median
5. Standard Deviation

Q. 4. Answer in detail (Any Two) (20)

1. Define Statistics. Explain its scope and importance.
2. Explain the concept and calculation of Standard Deviation.
3. What is correlation? Explain types and significance.
4. Explain Laspeyres and Paasche Index Numbers with formulas.

Q. 5. Case study (15)

Data of advertising expenses (X in ₹000) and sales (Y in ₹000):

X: 10, 20, 30, 40, 50

Y: 20, 25, 35, 45, 55

Questions: -

1. Is there correlation?
2. Type of correlation?
3. How we Use the correlation in business?