

Roll No:

Date: _/ _/ _

St. Claret College

Autonomous, Bengaluru

12

UG END SEMESTER EXAMINATION-NOV 2025

BBA 1 SEMESTER

BM 1525: FUNDAMENTALS OF BUSINESS ANALYTICS

TIME: 3 hours.

MAX. MARKS: 80

This paper contains TWO printed pages and FOUR parts

Instructions:

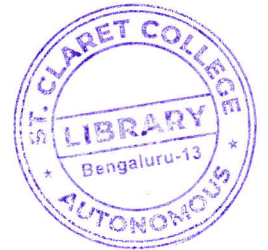
1. Verify and ensure that the question paper is completely printed.
2. Any discrepancies or questions about the exam paper must be reported to the COE within 1 hour after the examination.
3. Students must check the course title and course code before answering the questions.

PART-A

Answer ALL questions. Each answer carries ONE mark.

[1 x 10 = 10]

1. Business Analytics primarily helps organizations to:
 - a) Store data
 - b) Make data-driven decisions
 - c) Reduce data
 - d) Increase file size
2. Which of the following best describes OLTP?
 - a) Analytical processing
 - b) Real-time transaction processing
 - c) Data visualization
 - d) Data cleaning
3. Data Mining is the process of:
 - a) Storing data
 - b) Finding hidden patterns in data
 - c) Deleting data
 - d) Encrypting data
4. The CRISP-DM model is mainly used for:
 - a) Data storage
 - b) Data mining process
 - c) Data visualization
 - d) Data backup
5. A flowchart is used to:
 - a) Represent program logic visually
 - b) Store data
 - c) Display charts
 - d) Manage dashboards
6. Pseudocode is:
 - a) Machine code
 - b) A simplified way to describe an algorithm
 - c) Source code
 - d) None of these
7. Which of the following is used for data visualization?
 - a) Tableau
 - b) Python
 - c) Excel
 - d) All of the above
8. Correlation in EDA measures:
 - a) Relationship between variables
 - b) Data volume



- c) Data type
- d) None
- 9. Business Intelligence mainly focuses on:
 - a) Raw data entry
 - b) Reporting and decision-making
 - c) Software development
 - d) Security only
- 10. Dashboards in BI are used for:
 - a) Displaying KPIs
 - b) Writing code
 - c) Sending emails
 - d) Collecting raw data

PART-B

Answer any **THREE** questions. Each answer carries **EIGHT** marks.

[3 x 8 = 24]

- 11. What is data mining? Explain the different techniques used in data mining.
- 12. What is BI? Explain the components of BI in detail.
- 13. What are the key differences between an algorithm, pseudocode, and a flowchart?
- 14. Define Exploratory Data Analysis (EDA). Explain its significance and describe the main types of EDA.
- 15. Explain the features of Python in detail.

PART-C

Answer any **THREE** questions. Each answer carries **TWELVE** marks.

[3 x 12 = 36]

- 16. Define Business Analytics and explain its scope, tools, and ethical challenges.
- 17. What is data governance? What are the key principles of GDPR?
- 18. Explain insertion sort with its algorithm. Apply it on the array [7, 12, 9, 11, 3] and explain the steps.
- 19. Explain the commonly used charts in data visualization — Histogram, Box Plot, Line Chart, and Scatter Plot — highlighting their purpose, key features, interpretation, and suitable examples.
- 20. Write about OLAP in detail, explain the OLAP cube, the benefits of OLAP, and how it differs from OLTP.

PART-D

Answer the following question. The answer carries **TEN** marks.

[1 x 10 = 10]

- 21. A small e-commerce business wants to analyze its **sales data** to understand **which products are selling the most and which regions perform best**.
 - a. Which type of analytics (descriptive, diagnostic, predictive, or prescriptive) is most suitable here? Justify your choice.
 - b. How can data visualization help the business make better decisions?
 - c. Explain the summary statistics used here.
 - d. Explain the concept of correlation.