

Roll No:

Date: __/__/__

St. Claret College

Autonomous, Bengaluru

UG END SEMESTER EXAMINATION-NOV 2025

BCom 1 SEMESTER

BC 1525: FUNDAMENTALS OF BUSINESS ANALYTICS

12

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 is best defined as _____
a) Study of data to support decisions
b) Data entry process
c) Hardware maintenance
d) Record storage
2. OLAP systems are primarily used for _____.
a) Transaction updates
b) Complex analysis
c) Email alerts
d) Data backups
3. The process of turning raw data into useful information is called _____.
a) Data Entry
b) Data Mining
c) Data Encryption
d) Data Replication
4. Which of these ensures quality, security, and ethical use of data?
a) Data Cleaning
b) Data Governance
c) Data Duplication
d) Data Transfer
5. An algorithm helps programmers to _____.
a) Define logical steps
b) Store images
c) Record transactions
d) Hide errors
6. Flowcharts are mainly used to _____.
a) Show process flow
b) Create charts
c) Store data
d) Encrypt text
7. Boxplot is used to display _____.
a) Central tendency
b) Spread and outliers
c) Correlation
d) Trend lines
8. KPI stands for _____.
a) Key Performance Indicator
b) Knowledge Process Insight
c) Known Pattern Index
d) Key Product Indicator
9. Business Intelligence evolved from _____.
a) DSS, EIS, and MIS
b) Data entry software
c) ERP
d) CRM



10. BI tools such as Power BI and Tableau are mainly used for _____.
- a) Visualization b) Coding c) Hardware testing d) Security checks

PART-B

Answer any THREE questions. Each answer carries EIGHT marks. [3 x 8 = 24]

11. Discuss the core components of Business Analytics. Write briefly about the ethical considerations while doing the analysis.
12. What are the key challenges in data mining? Explain in detail.
13. Write short notes on algorithms and their benefits with the help of an example.
14. Explain the summary statistics and correlation with appropriate examples.
15. Describe any two types of BI users and their roles.

PART-C

Answer any THREE questions. Each answer carries TWELVE marks. [3 x 12 = 36]

16. Compare OLAP and OLTP with suitable examples.
17. Explain any four data mining techniques in detail (Regression, Classification, Clustering, Association Rule Mining, Anomaly Detection, Artificial Neural Networks etc.).
18. What is bubble sort? Write the algorithm and implement it on the array [7, 12, 9, 11, 3], explaining the steps.
19. Explain the features of Python in detail.
20. Explain the process of CRISP-DM taking a case study in the domain of your choice.

PART-D

Answer the following question. The answer carries TEN marks. [1 x 10 = 10]

21. A supermarket chain wants to analyze monthly sales data to identify seasonal trends and high-demand products.
 - a. Which analytics method would you use to identify seasonal patterns? Justify your choice.
 - b. Write briefly about the quantitative and qualitative data that must be collected.
 - c. Suggest two visualizations that can help with the analysis.
 - d. Mention two benefits of business analytics applicable to the case study.