



QP CODE: 25024882



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, APRIL 2025
Fourth Semester
M Sc Computer Science (Data Analytics)
ELECTIVE - CA860402 - BUSINESS DATA ANALYTICS
2020 ADMISSION ONWARDS
CA03524B

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What is the advantages of using primary data?
2. List out the applications of business analytics.
3. What are the uses of descriptive statistics?
4. Differentiate between Discrete and Continuous data.
5. Define Variance and Standard Deviation.
6. How to calculate the expected mean and variance of a discrete random variable?
7. Define discrete probability distribution.
8. What are the features of MapReduce?
9. Differentiate between grouping and aggregation using mapreduce.
10. Define Pentaho. What are its features?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Describe the major skills required for a business analyst.
12. Write note on the framework for business analytics?
13. Find the Frequency, relative frequency and percent frequency distribution for the following data:
12,14,18,19,15,15,18,17,20,27,22,23,22,21,33,28,14,18,16,13
14. Write short note on a). Heatmap b). Dashboards





15. A telephone number is selected at random from a directory. Suppose X denotes the last digit of the selected telephone number. Find the probability that the last digit of the selected number is a) 6 b). Less than 3 c). Greater than or equal to 8
16. Explain data sampling.
17. Write a short note on relational algebra operations.
18. What is the use of HQL joins? Explain the different types of joins with example.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Explain the life cycle phases of business analytics?
20. Calculate the Quartile Deviation and its coefficient of the following data: 24,32,,46,48,39,42,28,25,26,24,38
21. An auto company decided to introduce a new six cylinder car whose mean petrol consumption is claimed to be lower than that of the existing auto engine. It was found that the mean petrol consumption for the 50 cars was 10 km per litre with a standard deviation of 3.5 km per litre. Test at 5% level of significance, whether the claim of the new car petrol consumption is 9.5 km per litre on the average is acceptable.
22. Briefly explain how Hadoop differ from RDBMS.

(2×5=10 weightage)

