

Class : III M.C.A
Major : COMPUTER APPLICATIONS

Time: 3 hours
Max. Marks: 60

12MCAC28 DATA ANALYTICS AND BUSINESS INTELLIGENCE

Part A

10 x 1/2 = 5

Choose the correct answer

1. _____ Test is applied when samples are less than 30.
a. Z-test b. T-test c. F-test d. Chi-square test
2. Maximum value of correlation is _____.
a. +1 b. 0 c. -1 d. 2
3. R is an _____ programming language.
a. closed source b. Software development
c. Open source d. GPL
4. _____ is used to make predictions about unknown future events.
a. descriptive analysis b. predicative analysis
c. both d. none of these
5. _____ is proprietary tool for predictive analytics.
a. R b. SPSS c. SSAS d. SAS
6. Which one is not the big data feature?
a. Velocity b. Veracity c. Volume d. Variety
7. Business Intelligence (BI) is a broad category of application programs which includes _____.
a. Decision Support b. Data Mining
c. OLAP d. All of the mentioned.
8. Which of the following areas are affected by BI?
a. Revenue b. CRM c. Sales d. All of the mentioned.
9. Business Intelligence (BI) reporting systems cannot do which of the following operations?
a. Filter Data b. Modify Data c. Both Filter and Group Data d. Group Data
10. Consider the following two statements:
i. BI and Data warehousing is used for forecasting and Data Mining.
ii. Business Intelligence and Data warehousing is used for analysis of large volumes of sales data.
Which one of the following options is correct?
a. TT b. TF c. FT d. FF

Part B

5 x 4 = 20

Answer ALL questions

Each answer should not exceed 200 words or one page

11. a. Elucidate the cross validation.
(Or)
11. b. Distinguish between correlation and regression.
12. a. Mention the features of R language.
(Or)
12. b. Give an overview of forecasting.
13. a. Describe the risk of Big Data.
(Or)
13. b. Write a note on Data Visualization.
14. a. What do you mean by Business Intelligence? Explain its benefits.
(Or)
14. b. Give a brief note on capabilities of Business Intelligence.
15. a. Mention the components of business intelligence development.
(Or)
15. b. Elaborate the major business intelligence vendors.

Part C

5 x 7 = 35

Answer ALL questions

Each answer should not exceed 600 words or three pages

16. a. Explain the following:
i). Probability density function ii). Probability distribution function.
(Or)
16. b. Elucidate Hypothesis Testing and mention the steps for hypothesis.
17. a. Describe the forecasting goals and evaluate predictive accuracy.
(Or)
17. b. Explicate mean, median and mode functions of statistical analysis in R
18. a. Enlighten the open source technology for big data analytics.
(Or)
18. b. Write short notes on Big Data Analytics.
19. a. Elaborate the role of business intelligence in organizational memory.
(Or)
19. b. Give an overview of business intelligence technology.
20. a. Illustrate the development phases of business intelligence project.
(Or)
20. b. Discuss the management of business intelligence.
