

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Data Mining and Business Intelligence

Semester: 5th

Program: BBA DM

Course code: DSIT3001

Instructions:

Time: 03 Hours

Max. Marks: 100

SECTION A

(20 Marks)

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| Q1 | Business intelligence improves marketing effectiveness by enabling marketers to: a. Analyze business data to uncover trends across product categories, SKUs, customers and regions b. Identify profitable customers who could participate in VIP, loyalty and reference/case study programs c. Use specific targeting to maximize revenue and minimize marketing overheads d. All of the above | 1 (CO1) |
| Q2 | We can measure Key Performance Indicators (KPIs) in a business intelligence tool. KPIs can: a. Guarantee your business will grow by 125% b. Ensure your business will reduce costs by 55% c. Drive improvements and help businesses focus their people and resources on what counts d. None of the above | 1(CO1) |
| Q3 | Andrew works for X Saloon. His role is to collect information on the company's sales, on the sales of the competition, and on the new fashion trends. He joins this information in order to make decisions on what to supply the stores. This combined information is called: a. Business Intelligence b. Data c. Information d. Knowledge | 1(CO1) |
| Q4 | Sanjiv works for Redwood Insurance Company. She reviews the documents submitted by customers and either accept or reject the claims. This type of decisions that Salma takes every day is an example of a. Strategic Decisions b. Operational Decisions c. Managerial Decisions d. Unstructured Decisions | 1(CO1) |
| Q5 | What is the full form of SQL? a. Structured Query Language b. Structured Query List c. Simple Query Language d. None of these | 1(CO1) |
| Q6 | The full form of DDL in Database Management System is a. Dynamic Data Language b. Detailed Data Language c. Data Definition Language d. Data Derivation Language | 1(CO1) |
| Q7 | A technique in data mining which we use to predict future behavior and anticipate the consequences of change. | 1(CO1) |

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| | <ul style="list-style-type: none"> a. Predictive technology b. Disaster recovery c. Phase change e. Predictive modeling | |
| Q8 | <p>What are the challenges to developing BI with semi-structured or unstructured data?</p> <ul style="list-style-type: none"> a. Unstructured data is stored in a huge variety of formats b. There is a need to develop a standardized terminology c. Both a and b d. Problem of format and terminology is just with unstructured data and not semi structured data | 1(CO1) |
| Q9 | <p>Which statement is used to modify data in a database?</p> <ul style="list-style-type: none"> a. SAVE b. UPDATE c. SAVE AS d. MODIFY | 1(CO1) |
| Q10 | <p>An advantages of using cloud BI over on premise BI system:</p> <ul style="list-style-type: none"> a. Ease of deployment b. Reduced overheads c. Scalability d. All of above | 1(CO1) |
| Q11 | <p>BI in sales gives</p> <ul style="list-style-type: none"> a. Ability to see your top and bottom customers by profit, sales value and margin b. Ability to compare sales over time, sales vs no sales, gap analysis, trend analysis and forecasting c. A more informed sales team who can make data driven decisions d. All of the above | 1(CO1) |
| Q12 | <p>Which statement about the ETL is NOT correct?</p> <ul style="list-style-type: none"> a. ETL stands for Extract Transformation Load b. ETL automates the integration of various data sources c. ETL may be the link between operational systems and a data warehouse d. ETL ensures high quality of data in a data warehouse | 1(CO1) |
| Q13 | <p>Technique of tailoring the Websites to individual user's preferences and characteristics</p> <ul style="list-style-type: none"> a) Web services b) Customer-facing c) Customer valuation d) Personalization | 1(CO1) |
| Q14 | <p>Technology for gathering, storing, analyzing, and providing access to data to help business users to make better business decisions.</p> <ul style="list-style-type: none"> a) Data mart b) Business information warehouse c) Business intelligence d) Business warehouse | 1(CO1) |
| Q15 | <p>Which one is a subject-oriented, integrated, time-variant and non-volatile collection of data in support of management's decision-making process?</p> <ul style="list-style-type: none"> a) Data Mining b) Data Warehousing c) Document Mining d) Text Mining | 1(CO1) |
| Q16 | <p>A Data mining technique, which is used to anticipate the consequences of a change or to predict future behavior.</p> | 1(CO1) |

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| | <ul style="list-style-type: none"> a) Predictive technology b) Disaster recovery c) Phase change d) Predictive modeling | |
| Q17 | <p>Business Intelligence is used to improve inventory management and purchasing in which of the following ways?</p> <ul style="list-style-type: none"> a. Evaluating stock turns, inventory-to-purchase ratio, and slow-moving stock by manufacturer, product group, product, branch and store b. Forecasting, refined inventory management, and smoother delivery processes c. Identifying if a particular customer or product's ordering pattern had changed so you never miss an opportunity d. All of the above | 1(CO1) |
| Q18 | <p>Which of the following are direct benefits of Business Intelligence?</p> <ul style="list-style-type: none"> a. Decision making b. Delivers data mining functionality c. Artificial intelligence d. All of the above | 1(CO1) |
| Q19 | <p>A typical BI system comprises of?</p> <ul style="list-style-type: none"> a. Data warehouse b. Data mart c. OLAP TOOLS d. All of the above | 1(CO1) |
| Q20 | <p>Often, where do the BI applications gather data from?</p> <ul style="list-style-type: none"> a. Data warehouse b. Data mart c. Both a and b d. None of above | 1(CO1) |

SECTION B

(20 Marks)

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| Q1 | What are the recent trends in Data Mining? | 5(CO2) |
| Q2 | How is a Data warehouse different from Database? How they are similar? | 5 (CO2) |
| Q3 | Discuss about the importance of Data Visualization | 5 (CO2) |
| Q4 | Define Transactions. Illustrate difference between Historical and Real Time Data with relevant examples. | 5 (CO2) |

SECTION-C

(30 Marks)

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| Q1 | Identify and explain five business techniques to optimize an e-commerce business using Business Intelligence tools. | 10 (CO3) |
| Q2 | Elucidate the importance of Business Intelligence and Visualizations in Healthcare sector. | 10 (CO3) |
| Q3 | Describe the importance of High Availability Architecture. | 10 (CO3) |

SECTION-D

(30 Marks)

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| Q1 | <p>Kelso is a market town in the Scottish Borders area of Scotland. Together with the adjoining town of Linton, 5.2 miles (8.5 km) distant, Kelso forms the principal part of an urban area of approximately 50,000 people. Your Client Kelso Mart is a large supermarket with 20 aisles in the town of Kelso, Scotland. They have been the local market leader for more than 50 years; however, in the past 2 years they have seen growth stall, and a new local</p> | 15 (CO5) |
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| | supermarket take their market share. Kelso Mart now has only 25% market share and growth is almost flat. What could be the reasons? How do you help the client to fix the problem? | |
| Q2 | Illustrate Cognos story feature with an appropriate example. | 15(CO4, CO5) |