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**Presidency University**

**Bengaluru**

**SCHOOL OF COMMERCE**

**Make-Up Examinations, July 2024**

**Semester**: V

**Course Code**: BBB 3005

**Course Name**: Predictive Analytics

**Program:** BBB

**Date**: 01/ July / 2024

**Time**: 9.30 am -12.30 pm

**Max Marks**: 100

**Weightage**: 50%

**Instructions:**

1. *Read the all questions carefully and answer accordingly.*
2. *Question paper consists of three parts.*
3. *Scientific and Non Programable Calculators are Permitted.*
4. *Do not write any information on the question paper other than roll number.*

**Part A**

**Answer any FIVE Questions. (5 Q x 2 M = 10 M)**

1.Define analytics with a suitable example. (C.O.No.1) [KNOWLEDGE]

2. List the importance of predictive analytics in the firms. (C.O.No.1) [KNOWLEDGE]

3. Label the various sources of data. (C.O.No.2) [KNOWLEDGE]

4. List any two-software used for data analysis. (C.O.No.3) [KNOWLEDGE]

5. Outline the importance of linear regression. (C.O.No.4) [KNOWLEDGE]

6. Define business forecasting with a suitable. (C.O.No.5) [KNOWLEDGE]

7. Outline the benefits of time series analysis. (C.O.No.5) [KNOWLEDGE]

**Part B**

**Answer any FIVE Questions. (5 Q x 10 M = 50 M)**

8. Nestle, an FMCG sector improve their PR communications by leveraging business data and establishing objectives. Using the data will impact on social media engagement and sales inquiries. In this context, describe the benefits of predictive analytics in the context of Nestle’s advertising campaign. (C.O.No.1) [UNDERSTAND]

9. Accenture is a company with more than 500,000 employees and has always been a leader in the field of HR. In sales divisions, 30% of the people who worked for Accenture left. This was a big problem for the company's management. This meant that, on average, people stayed between 2 and 5 years. In this case, explain how predictive analytics can be used to lower the rates of employee attrition.

(C.O.No.1) [UNDERSTAND]

10. Netflix is a global OTT platform uses the historical data to understand consumer behavior on specific conditions. Further company incorporates descriptive and predictive analytics for sales to anticipate consumer subscription pattern. In this context, explain the importance of descriptive and predictive analytics used to recommends more personalization programs to the subscribers. (C.O.No.2) [UNDERSTAND]

11.Explain the benefits and applications of data visualization with a suitable example. (C.O.No.2) [UNDERSTAND]

12. Amex bank plans to speed up loan approvals by automating the process of assessing credit risk. Explain how predictive analytics can help lenders to analyze loan applicants' creditworthiness in financial sector. (C.O.No.3) [UNDERSTAND]

13.Explain the importance of predictive analytics in healthcare sector.

(C.O.No.3) [UNDERSTAND]

14. Describe the benefits and applications of the multilinear regression.

(C.O.No.4) [UNDERSTAND]

**Part C**

**Answer any TWO Questions. (2 Q x 20 M = 40 M)**

15. Infosys software solutions are used in over 20,000 hospitals, physician offices, and other medical facilities. Infosys access enables them to combine patient medical records and data from medical devices to create an integrated medical database to enhance health care. Several devices may foresee medical issues using digital health platform by feeding data into a single database. When the company used data analysis on a platform capable of saving many lives. In this context,  
1. How does Infosys firm deploy data analysis using predictive analytics in healthcare sectors? Interpret.  
2. Demonstrate how data analysis benefits hospitals by increasing healthcare services. (C.O.No.1) [APPLICATION]

16. Doing more with less" is the latest objective for businesses and consumers. Many firms have several information due to limited time, money, and staff. Thus, the firms can collect extensive data about their customers, prospects, and operations using current analytics and technology. Analytics is a tool that helps businesses identify opportunities to enhance sales, marketing, and customer service. In this scenario,   
 1. Interpret how analytics faces the challenges when they make their data driven decisions and develop strategies to engage the customers.  
2. Analytics enhances the profitability of the organization. Illustrate it (C.O.No.1) [APPLICATION]

17. Inefficient supply chains can have a negative impact on all aspects of a business. Predictive analytics can help improve supply chain efficiency by utilizing real-time information and predictive analytics models to make decisions based on accurate and current data, rather than outdated reports. One of the advantages of demand forecasting in supply chain management is that it can help reduce costs and achieve optimal inventories. In this specific context,   
1. Illustrate the challenges businesses face when deploying predictive analytics in supply chain management.  
2. How do predictive analytics minimize the risks in supply chain management? Interpret.

(C.O.No.3) [APPLICATION]