PRESIDENCY UNIVERSITY
BENGALURU

SET-A

SCHOOL OF MANAGEMENT
END TERM EXAMINATION – MAY/JUNE 2024

Semester: Semester VI - 2021
Course Code: BBB3026
Course Name: Predictive Analytics
Program: BBA

Date: May 31, 2024
Time: 9:30 AM - 12:30 PM
Max Marks: 100
Weightage: 50%

Instructions:
(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.
(iv) Do not write any information on the question paper other than Roll Number.

PART - A

ANSWER ANY 5 QUESTIONS   **5 X 2 = 10**

1. List the skills required to perform predictive analytics in the organization

(CO1) [Knowledge]

2. Outline the latest trends in predictive analytics

(CO1) [Knowledge]

3. An e-commerce company's sales in a specific product category are declining. You're in charge of evaluating consumer purchase data and developing data visualizations to offer to the marketing team. Identify which visualizations might be useful for comparing sales trends across product subcategories or customer segments

(CO2) [Knowledge]

4. Describe the importance of data visualization in health care sector to monitor the patients

(CO2) [Knowledge]

5. List the benfits of predictive analytics in HR domain.

(CO3) [Knowledge]

6. Define Linear regression with a suitable example.

(CO3) [Knowledge]

7. Define multi linear regression with a suitable example.

(CO4) [Knowledge]

PART - B

ANSWER ANY 5 QUESTIONS   **5 X 10 = 50**

8. A healthcare provider intends to employ predictive analytics to identify individuals who are at high risk of developing chronic diseases such as diabetes or heart failure. In this scenario explain how predictive analytics helps to reduce the patient severity

(CO1) [Comprehension]

9. A bank seeks to accelerate loan approvals by automating the credit risk assessment process. Explain how predictive analytics can help lenders to analyze loan applicants' creditworthiness

(CO1) [Comprehension]

10. Coca-Cola company incorporates various business intelligence and analytical tools to transform its business in the world. In this case, describe how analytics helps Coca-Cola to sell more products across the globe

(CO2) [Comprehension]

11. Describe the significance of data analysis in predictive analytics through data visualisation ,specifically in the IPL Cricket match to evalutae the palyers performance.

(CO2) [Comprehension]

12. Citibank plans to speed up loan approvals by automating the process of assessing credit risk. Explain how predictive analytics can help lenders to analyse loan applicants' creditworthiness.

(CO3) [Comprehension]

13. A global manufacturing firm wants to improve its supply chain by anticipating potential disruptions due to weather, political instability, etc. Explain how predictive analytics helps the firms strengthen their accuracy and productivity in this scenario.

(CO3) [Comprehension]

14. Describe the applications of logistic regression with a suitable example.

(CO4) [Comprehension]

PART - C

ANSWER ANY 2 QUESTIONS   **2 X 20 = 40**

15. Hewlett-Packard (HP) is a multinational corporation with over 300,000 workers that has long been a pioneer in the area of HR predictive analytics. In the sales divisions, 20% of HP employees left. This was a major issue for the company's management. This meant that they stayed for an average of 4 to 5 years. In this instance, Interpret how predictive analytics can be effectively utilized to reduce staff attrition rates   (CO1)[Application]

16. Inadequate supply chains ultimately affect all aspects of a business. Predictive analytics enhances supply chain efficiency by utilizing up-to-date information and predictive analytics use cases to make decisions based on accurate and current data, rather than relying on outdated reports. Demand forecasting in supply chain management has advantages such as reducing holding costs and achieving optimal inventory levels. In this specific context,
1. Illustrate the challenges that businesses face when deploying predictive analytics in supply chain management.
2. How do predictive analytics benefit supply chain management? Interpret it   (CO2[Application]

17. The use of predictive analytics improves healthcare by facilitating decision-making, enhancing patient outcomes, and relieving healthcare employees. With the aid of predictive analytics, clinicians have utilized the system to aid in medical decision-making and quickly review large amounts of data. The integration of predictive analytics into the healthcare system has yielded benefits for both doctors and patients. In this scenario,
1. Illustrate how predictive analytics benefits health care.
2. Why predictive modelling is important in health care? Interpret it.(CO3)[Application]