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**PRESIDENCY
UNIVERSITY**

BENGALURU
School of Computer Science and Engineering
Mid - Term Examinations - November 2024

Semester: V

Date: 4-11-2024

Course Code: CSE3036

Time: 09.30am to 11.00am

Course Name: Predictive Analytics

Max Marks: 50

Program: B.Tech (IST)

Weightage: 25%

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

5Qx2M=10M

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|---|--|---------|----|-----|
| 1 | List any two importance aspects of analytics. | 2 Marks | L1 | C01 |
| 2 | State two key applications of analytics in business. | 2 Marks | L2 | C01 |
| 3 | What are the basic challenges in implementing analytics? | 2 Marks | L1 | C02 |
| 4 | Define predictive analytics. | 2 Marks | L1 | C01 |
| 5 | Show how to use multivariate analysis. | 2 Marks | L2 | C02 |

Part B

Answer ALL Questions. Each question carries 10 marks.

4QX10M=40M

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|---|----|---|---------|----|-----|
| 6 | a. | Explain the importance of analytics in modern business. | 3 Marks | L1 | C01 |
| | b. | Discuss the challenges faced in implementing analytics solutions. | 2 Marks | L2 | C02 |
| | c. | Analyze a case study of predictive analytics implementation in retail sector. | 5 Marks | L2 | C03 |

Or

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|---|----|--|---------|----|-----|
| 7 | a. | Describe the evolution of analytics in business. | 3 Marks | L2 | C02 |
| | b. | State two applications of marketing analytics. | 2 Marks | L1 | C01 |

	c.	Elaborate on the decision-making process using analytics with examples.	5 Marks	L2	C03
8	a.	List two benefits of predictive modeling.	2 Marks	L1	C01
	b.	Describe the process of analytical decision making.	3 Marks	L2	C02
	c.	Discuss the evolution, importance, and future of analytics in business.	5 Marks	L2	C03
		or			
9	a.	What is the role of data quality in analytics?	2 Marks	L1	C01
	b.	Discuss the challenges in data-driven decision making.	3 Marks	L2	C02
	c.	Elaborate on the implementation of analytics in supply chain management.	5 Marks	L2	C02
10	a.	Demonstrate basic collaborative filtering.	2 Marks	L2	C02
	b.	Implement cluster analysis for market segmentation.	3 Marks	L2	C01
	c.	Discuss the potential business benefits of using predictive analytics for demand forecasting in the retail industry.	5 Marks	L3	C02
		or			
11	a.	How to implement k-means clustering?	2 Marks	L1	C01
	b.	Demonstrate collaborative filtering in product recommendations.	3 Marks	L2	C02
	c.	Apply and evaluate propensity models in customer lifetime value prediction.	5 Marks	L3	C03
12	a.	How to implement cluster analysis?	2 Marks	L1	C01
	b.	Apply propensity models in customer churn prediction.	3 Marks	L2	C02
	c.	Develop and assess collaborative filtering system for e-commerce.	5 Marks	L2	C02
		or			
13	a.	Demonstrate clustering techniques in customer segmentation.	3 Marks	L1	C02
	b.	How to use association rules?	2 Marks	L2	C01
	c.	Implement customer acquisition strategy using predictive modeling.	5 Marks	L2	C03