PVP24

Code No: **24BA2O1A**

I MBA - II Semester - Regular Examinations – JUNE 2025

BUSINESS ANALYTICS

Duration: 3 Hours Max. Marks: 70

Note: 1. This question paper contains two Parts: Part-A and Part-B.
2. Part-A contains 5 essay questions with an internal choice from each unit. Each Question carries 12 marks.
3. Part-B contains one Case Study for 10 Marks.
4. All parts of Question paper must be answered in one place

BL – Blooms Level CO – Course Outcome

PART - A

			BL	CO	Max. Marks
		UNIT – I			
1.	a)	Explain the concept of business analytics and why is it important in modern business decision-making?	L2	CO1	6 M
	b)	Explain the core components of a successful business analytics framework.	L2	CO1	6 M
		OR			
2.	a)	Distinguish the primary differences between a data scientist and a business analyst.	L2	CO1	6 M
	b)	Explain predictive analytics and provide an example of its application.	L2	CO1	6 M
		UNIT – II			
3.	a)	Illustrate the concept of Business Performance Management (BPM) and why is it essential for organizations.	L3	C02	6 M

	b)	Explain the challenges commonly faced during BPM implementation.	L2	CO2	6 M
OR					
4.	a)	Demonstrate main objectives of data mining in business applications.	L3	C02	6 M
	b)	Explain regression analysis and how is it used to predict numerical values?	L2	CO2	6 M
UNIT-III					
5.	a)	Illustrate HR Analytics. Explain the role of HR Analytics in Performance evaluation.	L3	CO3	6 M
	b)	Demonstrate Retail analytics. How does it help the business to improve performance?	L3	CO3	6 M
OR					
6.	a)	Explain different types of data commonly analyzed in marketing analytics.	L2	CO3	6 M
	b)	Explain how financial analytics help organizations manage cash flow and budgets.	L2	CO3	6 M
UNIT – IV					
7.	a)	Explain how predictive analytics differs from descriptive analytics.	L2	CO4	6 M
	b)	Demonstrate some common classification models used in predictive analytics.	L3	CO4	6 M
OR					
8.	a)	Distinguish the key differences between Python and R when performing predictive analytics tasks.	L2	CO4	6 M
	b)	Discuss the Applications of Predictive Analytics.	L2	CO4	6 M

UNIT – V					
9.	a)	Explain Descriptive Analytics. Explain how descriptive analytics helps organizations summarize historical data.	L2	CO5	6 M
	b)	Describe Data Visualization. Explain with three or more examples.	L2	CO5	6 M
OR					
10.	a)	Explain the primary features of Tableau and Power BI.	L2	CO5	6 M
	b)	Explain the benefits of Descriptive Analytics in Decision making.	L2	CO5	6 M

PART – B

11.	**CASE STUDY**	L3	CO2	10 M

A hospital wants to predict the likelihood of patients developing heart disease based on their medical history, lifestyle and genetic factors.

Questions:

i. Which data mining techniques would be best suited for predicting heart disease risk — regression, classification or clustering? Why?
ii. What key variables (e.g., age, BMI, smoking status) should be included in the data model?
iii. What steps can be taken to handle missing or incomplete patient records before building the model?
iv. How would you validate the model's accuracy and reliability before deploying it in real-life healthcare scenarios?