

Q. No.	Questions	CO	Bloom Taxonomy Category	Marks
Section I				
1	Short Answer type questions.			
a	Describe the concept of Data Mining and explain how it supports Business Analytics.	CO1	Remember	4 x 5 = 20
	or			
b	State three examples of how business analytics is used in organization.	CO1	Understand	
	or			
c	Explain what do you understand by Visualization of Data. List out different methods for the same.	CO2	Understand	
	or			
d	Illustrate the process of Data preparation in Analytics Methodology.	CO2	Apply	
	or			
e	Explore the concept of trend analysis, highlighting its significance. Describe the various types of trends commonly observed in time series data.	CO3	Understand	
	or			
f	Explain the concept of a moving average and how it is used in time series analysis.	CO3	Understand	
	or			
g	Explain the concept of Artificial Intelligence (AI) and describe two ways it is used in business operations.	CO4	Remember	
	or			
h	Explain how Web content mining and Web usage mining differ from each other with reference to their purposes.	CO4	Understand	
	or			
Section II				
Long Answer type questions.				
2	Examine the differences between structured, semi-structured, and unstructured data by evaluating their defining features. Provide relevant examples to illustrate each category.	CO1	Analyze	3 x 10 = 30
	or			
3	Examine the distinctions between relational and non-relational databases, highlighting their key differences. Provide practical examples to illustrate how each type is used in real-world applications.	CO1	Evaluate	
	or			
4	Determine the mean, median, and mode for the following dataset representing student scores:	CO2	Evaluate	
	or			
5	Compute the range and quartile deviation for the given dataset, evaluating their effectiveness as measures of dispersion. Additionally, determine the coefficient of quartile deviation to analyze variability within the data.	CO2	Evaluate	
	or			
6	Outline the fundamental components of the Holt-Winters exponential smoothing method and explain its operational framework in forecasting time series data.	CO3	Analyze	
	or			

The company has gathered demand data and intends to apply exponential smoothing for forecasting, using a smoothing constant (α) of 0.4. Below is the recorded actual demand over six years:

Year	Actual Demand (A_t)
1	280
2	340
3	370
4	400
5	430
6	410

CO3

Analyze

Section III

Application based questions

Analyze the tools and techniques linked to Big Data, assessing how organizations utilize them to strengthen their competitive strategic edge.

CO4

Create

or

Develop a comprehensive analysis of how Artificial Intelligence is transforming modern business models. Support your discussion with real-world examples showcasing its impact.

CO4

Evaluate

5

1 x 20 = 20

COURSE OUTCOME

On completion of the Course, the students will be able to:

CO 1: Demonstrate the awareness and Knowledge of Business Analytics

CO 2: Interpret the analytics methodology

CO 3: Assess the relevance and effectiveness of business analytics solutions

CO 4: Apply the knowledge of technical skills in descriptive and predictive modeling to support business decision making