



Daffodil International University
Faculty of Science & Information Technology
Department of Computing and Information System
Final Examination, Fall-2025

Course Code: BI334, Course Title: Data Analysis and Business Modeling

Exam Duration: 2 Hours

Level: 3 Term: 3

Marks: 40

Answer any 5 Questions out of the 7
[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]

1.	a)	What is Elasticsearch, and what problem does it solve?	2	CO2 L-1, 2 & 3
	b)	What is Kibana? What is Kibana Lens?	2	
	c)	How do you check if a specific index exists in Elastic? Give an Example of a JSON Array.	2	
	d)	How do you retrieve only selected fields from a document in Elastic? Give an example.	2	
2.	a)	How do you bulk-insert documents efficiently in Elastic? How do you create a saved search for reuse in Kibana dashboards?	2	CO3 L-1, 2, 3 & 6
	b)	What is ELK Stack? What role does Kibana play in Elastic?	2	
	c)	How to connect Kibana with a Django Backend and a NextJS Frontend?	2	
	d)	How do you build a geo-map visualisation using geo-point data in Kibana? What files are supported?	2	
3.	a)	What is Looker Studio, and how does it differ from Google Analytics?	2	CO4 L-1, 2, 3 & 5
	b)	What is a theme in Looker Studio? What is a theme in Looker Studio?	2	
	c)	Describe custom visualisations in LookerStudio. Explain advanced date range options.	3	
	d)	Define dimensions and metrics in LookerStudio.	1	
4.	a)	What are Breakeven Point & Repeat Purchase Rate? Write the Formula and Give Examples for both.	3	CO1 L-1, 3, 4 & 5
	b)	Find the value of CLTV, where: Revenue = 200,000 Taka, Number of Orders = 500, Purchase Frequency = 18 / Year, Lifespan = 4 Years.	2	
	c)	What are Bounce Rate & Customer Churn Rate? Write the Formula and Give Examples for both.	3	

5.	a)	What is ThoughtSpot? Explain the concept of Search-Driven Analytics.	2	CO5 L-1, 2, 3 & 5
	b)	What are AI-driven insights in Thoughtspot? Give Examples.	2	
	c)	What is SpotApps in ThoughtSpot? Write details.	2	
	d)	What are table relationships in ThoughtSpot? Explain synonyms and indexed search.	2	
6.	a)	What is SAP Analytics Cloud? What is Model here? Describe SAC's scheduling capabilities.	3	CO5 L-1, 3, 4 & 5
	b)	Describe value driver trees in SAP Analytics Cloud. What is Predictive Planning? Explain live vs import connections in SAP Analytical Cloud.	3	
	c)	What is StrategyB used for? Explain Strategy Mapping in StrategyB.	2	
7.	a)	What are strategic alerts in StrategyB? What is performance alerts automation? What is a strategy canvas?	3	CO5 L-1, 2, 3 & 4
	b)	What is Jaspersoft Studio? What is Jasper Server? Explain JRXML files.	3	
	c)	What is a datasource in Jaspersoft? Explain the details of subreports.	2	