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Even Semester End Term Examination, May / June 2026

Date: 20/05/2026		**Time: 01.00 PM - 04.00 PM**
Course Code: MBA3141	**Course Name: Website Data Analytics**	
Semester: Fourth Semester	**Max. Marks: 100**	**Weightage: 50%**

CO - Levels	CO1	CO2	CO3	CO4
Marks	29	29	41	41

Part A: Answer Following Questions. 30 M

Qn.No	Questions	M	CO	BT
1	Explain the term "Read-only Web" in the context of Web 1.0.	3	CO1	BT2
2	Explain Sarcasm Detection in sentiment analysis and why is it challenging.	3	CO1	BT2
3	Briefly write about Predictive Decision Making in Web 4.0.	3	CO1	BT2
4	Difference between Structured and Unstructured data in Machine Learning Data collection.	3	CO2	BT2
5	Define Engagement Rate for YouTube and provide its formula.	3	CO2	BT2
6	Explain the Attribute Level of customer perception in Woodruff's theory.	3	CO2	BT2
7	Describe Tracking Cookie and how does it assist in targeted advertising.	3	CO3	BT2
8	Define Micro-conversions with two specific examples.	3	CO3	BT2
9	Difference between internal benchmarking and Competitor benchmarking.	3	CO4	BT2
10	Define model evaluation. Mention any one metric.	3	CO4	BT2

Part B: Answer Any 1 Following Questions. 10 M

Qn.No	Questions	M	CO	BT
11	Analyze how Web 4.0 (The Digital Brain) will transform the role of the user from a participant to a co-decision maker.	10	CO1	BT3

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12	A fashion retailer uses high-quality video catalogs but lacks social sharing. Analyze how moving to a Web 2.0 "Social Web" model could impact their Conversion Rate.	10	CO1	BT3

Part C: Answer Any 1 Following Questions. 10 M				
Qn.No	**Questions**	**M**	**CO**	**BT**
13	Compare First-party and Third-party cookies. Evaluate the impact on a digital marketing agency if all browsers block third-party cookies by default.	10	CO2	BT3
14	A luxury hotel brand ignores negative comments on YouTube. Using Sentiment Analysis importance, evaluate the risks to their Brand Reputation and marketing strategy.	10	CO2	BT3

Part D: Answer Any 1 Following Questions. 10 M				
Qn.No	**Questions**	**M**	**CO**	**BT**
15	Explain the Machine Learning Pipeline step of Feature Engineering. Analyze how domain knowledge crucial in this stage.	10	CO3	BT3
16	Analyze the YouTube Performance Metrics (Views vs. Watch Time). Use the metric with better indicator of Audience Retention with justifications.	10	CO3	BT3

Part E: Answer Any 1 Following Questions. 10 M				
Qn.No	**Questions**	**M**	**CO**	**BT**
17	Discuss the Privacy Sandbox debate. Is it a tool for "Real Privacy" or "Controlled Tracking". Argue from the perspective of a Privacy Activist.	10	CO4	BT3
18	Evaluate the shift from Web 3.0 (Ownership) to Web 4.0 (Intelligence). Explain the concept of a "Digital Brain" change business-user collaboration.	10	CO4	BT3

Part F: Answer Following Questions. 30 M				
Qn.No	**Questions**	**M**	**CO**	**BT**
19	Zenith Mobile, a premium smartphone manufacturer, recently launched its flagship "Zenith X1" using a digital-first strategy. The product was heavily promoted through YouTube influencers, high-intensity social media campaigns, and direct links to e-commerce platforms. Initially, the launch appeared to be a massive success; a viral "Unboxing" video generated 2 million views and high initial engagement rates. However, after two weeks, the brand faced a "Sentiment Crisis". While YouTube views continued to climb, actual course-enrollment equivalents in sales stagnated, and the Cart	15	CO3	BT4

	Abandonment Rate spiked by 30%. The analytics team discovered a significant disconnect in platform sentiment. YouTube comments remained largely positive, driven by the charisma of influencers and the aesthetic appeal of the device. In contrast, verified buyers on the official website and users on social media began reporting technical hardware issues, leading to a surge in negative sentiment. This disconnect highlights the gap between Awareness/Interest (driven by reach) and Evaluation/Purchase (driven by trust and product reality). Specifically, Influencer A maintained high engagement but attracted increasingly negative feedback, whereas Influencer B had lower reach but much higher sentiment quality. This scenario demonstrates that high traffic without Conversion Intelligence is merely "noise" and does not necessarily translate into business growth. **Case Questions:** a) Perform a multi-platform sentiment analysis between the YouTube data and the Website reviews. Describe the specific insights can you derive about the customer's journey from "Hype" to "Disappointment". b) Discuss how the Sarcasm Detection or Intent Analysis of these comments help in understanding whether the negative feedback is about the product itself or the delivery service.			

20	**Case Study: “The Viral Spike but Revenue Dip – Retail Brand Challenge”**
	
	An online retail fashion brand launched a new campaign using influencers and short-form video content.
	
	Observed Data:
	
	• Website traffic increased by 80%
	• One video went viral (3M+ views)
	• Engagement rate (likes, shares) increased significantly
	• However:
	  ◦ Conversion rate dropped from 4% to 2.2%
	  ◦ Cart abandonment increased to 45%
	• Sentiment analysis (from 300 comments):
	  ◦ Positive: 50%
	  ◦ Neutral: 20%
	  ◦ Negative: 30%
	
	· Customer Feedback (from comments):
	
	• “Looks good but expensive”
	• “Not sure about quality”
	• “Delivery issues mentioned in reviews”
	
	· Competitor Insights:
	
	• Competitor has:
	  ◦ Lower traffic
	  ◦ Higher conversion (5%)
		15	CO4	BT4

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	◦ Stronger positive sentiment (65%) · Additional Insights: • High traffic from social media (low intent users) • Pricing page shows maximum drop-off • Repeat visits are low • Influencer campaigns created awareness but not trust **Case Questions:** a) Using marketing funnel and KPI framework, analyze the situation and answer: Identify the stage(s) where major drop-offs occur. Classify KPIs into leading and lagging indicators. Diagnose whether the issue is: · Traffic quality · Pricing perception · Trust deficit Recommend data-driven solutions to improve conversion. b) Using sentiment analysis and customer value theory, evaluate: How sentiment is impacting purchase decisions. Explain the role of functional, emotional, and economic value in this case.			