

<b>Trimester: Jan – Mar 24</b>		
<b>Maximum Marks: 50      Examination: ETE Exam      Date: 01.04.2024      Duration: 3HRS.</b>		
<b>Programme code: 01</b> <b>Programme: MBA</b>	<b>Class: SY</b>	<b>Trimester: VI</b>
<b>College: K. J. Somaiya Institute of Management</b>	<b>Name of the department/Section/Center:</b>	
<b>Course Code: 217P01M602</b>	<b>Name of the Course: Web &amp; Social Media Analytics</b>	
<b>Instructions:</b> <b>1. Question No. 10 is compulsory.</b>  <b>2. Answer any 8 questions from Question 1 to Question 9.</b>		

Question No.		Max. Marks																								
Q1	Calculate customer lifetime value and interpret the result assuming that customer acquisition cost is 450 Rs, Discount Rate is 10%, Gross Profit Margin is 75%, Retention Rate is 59% assume average yearly sales is 20000 Rs.	5M																								
Q2	Briefly explain the process for building a social media mining application.	5M																								
Q3	<p>What is abandonment rate? Calculate Cost per lead for below data assume budget of your choice and explain which platform has the cheapest lead acquisition cost?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Overall</th> <th>Instagram</th> <th>TikTok</th> </tr> </thead> <tbody> <tr> <td>Budget</td> <td>Your choice</td> <td>Your choice</td> <td>Your choice</td> </tr> <tr> <td>CPC Avg</td> <td>2.8</td> <td>3.1</td> <td>2.5</td> </tr> <tr> <td>Lead CVR %</td> <td>1.18%</td> <td>1.10%</td> <td>1.25%</td> </tr> <tr> <td># Clicks</td> <td>?</td> <td>?</td> <td>?</td> </tr> <tr> <td>Cost/Lead</td> <td>?</td> <td>?</td> <td>?</td> </tr> </tbody> </table>		Overall	Instagram	TikTok	Budget	Your choice	Your choice	Your choice	CPC Avg	2.8	3.1	2.5	Lead CVR %	1.18%	1.10%	1.25%	# Clicks	?	?	?	Cost/Lead	?	?	?	5M
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Q4	Which tasks we can easily perform using NLTK?	5M																								
Q5	Explain at least 10 different attributes of tweet.	5M																								
Q6	Calculate cosine similarities between below sentences. sentence_1 = "It is going to rain today" sentence_2 = "It is not going to rain today"	5M																								
Q7	Explain how we can mine twitter conversations.	5M																								
Q8	What is Folium? Explain Applications of Folium.	5M																								
Q9	What is tokenization? Explain at least 3 different tokenization techniques.	5M																								
Q10	Calculate TF, IDF and TF-IDF matrix for below sentences using appropriate stop words and lemmatization techniques. sentence_1 = "It is going to rain today" sentence_2 = "I am not going to office today" sentence_3 = "I am going to watch a football match"	10 M																								
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