

Name:

Enrolment No:



**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, May 2020**

**Course:** Social Analytics

**Program:** B.Tech. CSE (CCVT, MFT, OSS, TI, BAO, BFSI)

**Course Code:** CSIB480

**Semester:** VIII

**Time** : 03 hrs.

**Max. Marks:** 100

**Instructions: Attempt all questions, however internal choices are mentioned in Section B.**

**SECTION A (Multiple Choice Questions)**

S. No.		Marks	CO
Q 1	Consider the below statements regarding social media: 1. It is based on Web 3.0 2. It improves communications internally 3. Companies always use social media to recruit new employees 4. Social media communication is a valuable business strategy Which of the above are incorrect? a) 1,2 and 4 b) 2 and 4 c) 1 and 3 d) All are correct	2	CO1
Q 2	Which of the following is not a challenge while collecting data for social media? a) Extraction of relevant data b) Secured storage and maintenance c) Scalable architecture d) Collection of structured data	2	CO2
Q 3	_____ is the subset of the site traffic for a defined period of time. a) Segmented b) Aggregate c) Dimension d) Ratio	2	CO3
Q 4	_____ are defined as a collection of widgets that gives all the business personnel an overview of the reports and metrics that are important. a) Charts b) Dashboards c) Graphs d) Plots	2	CO4

Q 5	<p>In which mode, Pilot projects are defined and Concrete projects are set up which should lead to immediate business results?</p> <ul style="list-style-type: none"> <li>a) Pilot</li> <li>b) Integration</li> <li>c) Leverage</li> <li>d) Capability</li> </ul>	2	CO5
Q 6	<p>Identify the correct statements among:</p> <ul style="list-style-type: none"> <li>1. A relationships matrix shows the relationship between any two dimensions.</li> <li>2. A relationships table is a two-dimensional table that shows the association between two dimensions by measuring the degree of affinity.</li> </ul> <ul style="list-style-type: none"> <li>a) Only 1</li> <li>b) Only 2</li> <li>c) Both are correct</li> <li>d) None are correct</li> </ul>	2	CO4
Q 7	<p>Identify the correct statements:</p> <ul style="list-style-type: none"> <li>1. A “social graph” provides a map of the personal connections of a person or a group.</li> <li>2. People never rely on context and information before making decisions or purchases</li> <li>3. Social media is rich in information</li> <li>4. Social media can be applied to any technology that could involve interactions among the people like the web or social sites</li> </ul> <ul style="list-style-type: none"> <li>a) 2,3,4</li> <li>b) 1,3,4</li> <li>c) 1,3,4</li> <li>d) all are correct</li> </ul>	2	CO2
Q 8	<p>Consider the below statements:</p> <ul style="list-style-type: none"> <li>1. Social analytics consist of web analytics, engagement, and revenue generated from social media</li> <li>2. Web Analytics enables measuring, collecting and analyzing web traffic data to understand the user behavior on websites only</li> </ul> <ul style="list-style-type: none"> <li>a) Only 1 is correct</li> <li>b) Only 2 is correct</li> <li>c) Both are correct and 2 is the correct reason for 1</li> <li>d) Both are correct but 2 is not the reason for 1</li> </ul>	2	CO1
Q 9	<p>Which of the following tells how often visitors visit the website during the reporting period?</p> <ul style="list-style-type: none"> <li>a) Visitor Recency</li> </ul>	2	CO3

	<ul style="list-style-type: none"> <li>b) Length of visit</li> <li>c) Visitor Loyalty</li> <li>d) Depth of visit</li> </ul>		
Q 10	<p>Which of the following represents the numerical values of the different variables by the height or length of rectangles of equal width?</p> <ul style="list-style-type: none"> <li>a) Bar chart</li> <li>b) Trend chart</li> <li>c) Pie chart</li> <li>d) Flow chart</li> </ul>	2	CO4
Q 11	<p>Which of the following acts as the binding agent between the business and consumer?</p> <ul style="list-style-type: none"> <li>a) Community managers</li> <li>b) Influencers</li> <li>c) Social graph managers</li> <li>d) Agents</li> </ul>	2	CO2
Q 12	<p>Developing goals and objectives, engagement strategies and engagement guidelines are activities of _____.</p> <ul style="list-style-type: none"> <li>a) Strategy Execution</li> <li>b) Strategy Planning</li> <li>c) Integration</li> <li>d) Scheduling</li> </ul>	2	CO5
Q 13	<p>The ___ in a sentiment term must be enclosed in forward slashes (/).</p> <ul style="list-style-type: none"> <li>a) Blocker</li> <li>b) Opinion</li> <li>c) Regular expression</li> <li>d) snippet</li> </ul>	2	CO4
Q 14	<p>Websites uses social analytics tools like:</p> <ol style="list-style-type: none"> <li>1. File logs</li> <li>2. Google analytics</li> <li>3. IBM social media analytics</li> <li>4. Web Trends</li> </ol> <p>Find the correct options:</p> <ul style="list-style-type: none"> <li>a) 1,2,3</li> <li>b) 2,3</li> <li>c) 2,3,4</li> <li>d) All are correct</li> </ul>	2	CO1
Q 15	<p>Web logs and Java script tags are ways of _____mechanism.</p> <ul style="list-style-type: none"> <li>a) Data collection</li> <li>b) Data Analysis</li> <li>c) Data monitoring</li> <li>d) Data usage</li> </ul>	2	CO2
Q 16	<p>Consider the below statements:</p> <ol style="list-style-type: none"> <li>1. All the web sites exist to ensure that visitors to the site can complete the tasks they came to the site for, whether B2B or B2C</li> <li>2. Measuring success does not concern visits or average page views but needs to measure Visitor behavior</li> </ol>	2	CO3

	<p>3. The term economic value is the imputed value of an action taken by someone on the website</p> <p>4. The one primary goal of a site is the Macro Conversion</p> <p>Correct statements are:</p> <p>a) 1,3,4</p> <p>b) 2,4</p> <p>c) 1,2,3</p> <p>d) All are correct</p>		
Q 17	<p>Identify the incorrect statements:</p> <ol style="list-style-type: none"> <li>1. It is highly recommended to conduct periodic security audits of the data capture and storage in the company</li> <li>2. A data collection strategy is to use the social media API in order to capture the targeted data and information</li> <li>3. A social media KPI allows the business to easily collect social data across the social media sites</li> <li>4. One of the social network sites which have the largest number of active users is Instagram</li> <li>5. Using the unstructured data to create the user profiles is a best practice for collecting data from social networks</li> </ol> <p>a) 1,2,4</p> <p>b) 2,3,5</p> <p>c) only 3</p> <p>d) 3 and 5</p>	2	CO2
Q 18	<p>Consider the below statements:</p> <ol style="list-style-type: none"> <li>1. "Listen" in social media means understanding what is being said about the organization, brand, product, or service</li> <li>2. "React" in social media means customers expect organizations to attend to their concerns and suggestions</li> </ol> <p>a) Only 1 is correct</p> <p>b) Only 2 correct</p> <p>c) Both are correct</p> <p>d) None of them is correct</p>	2	CO1
Q 19	<p>Data Scrapping means:</p> <ol style="list-style-type: none"> <li>a) Data scraping is most often done to either interface to a legacy system which has no other mechanism which is compatible with current hardware, or to interface to a third-party system which does not provide a more convenient API.</li> <li>b) Data scraping often involves ignoring binary data (usually images or multimedia data), display formatting, redundant labels, superfluous commentary, and other information which is either irrelevant or hinders automated processing.</li> <li>c) Both a and b</li> </ol>	2	CO3

	d) None of the above		
Q 20	Web profile is generated from? a) Web data b) Social data c) User data d) CRM	2	CO5
Q 21	“Facebook” represents which of the following social media models? a) Centralized b) Hub and spoke c) Cross functional d) Distributed	2	CO2
Q 22	The point at which the navigational path within the site ends or where the customer exits the site is called as: a) Page b) Page view c) Entry page d) Exit page	2	CO1
Q 23	Remote and online outsourced are types of? a) Usability alternatives b) Recruiting c) Remote studies d) User research	2	CO2
Q 24	Identify the correct statements: 1. Segmentation is an area of analysis that analyzes the authors of social media content to provide more insight into contributors on a particular topic 2. A topic is defined as a group of word phrases that is used to identify a set of related documents 3. IBM Social Media Analytics categorizes snippets as positive, negative, neutral, and ambivalent, using the sentiment terms 4. Sentiment analysis and opinion mining are different 5. Viewing the affinity relationships can be done using a relationship table or a matrix  a) 1,2,3,4 only b) 2,3,5 only c) 1,2,3,4,5 d) 1,2,3,5 only	2	CO4
Q 25	_____mashups combine similar types of media and information from multiple sources into a single representation. a) Business b) User c) Consumer d) Data	2	CO5
Q 26	Which of the following means “Businesses can tailor campaigns and content to encourage sharing and commenting by users”?	2	CO1

	<ul style="list-style-type: none"> <li>a) Listening</li> <li>b) Monitoring &amp; analysis</li> <li>c) Understanding the consumers</li> <li>d) Behavior analysis</li> </ul>		
Q 27	<p>Social media analytics and monitoring must continuously improve their customer service capabilities by offering better _____.</p> <ul style="list-style-type: none"> <li>a) Exit rate</li> <li>b) Response rate</li> <li>c) Bounce rate</li> <li>d) Hit rate</li> </ul>	2	CO5
Q 28	<p>What demographic data can tell about choosing a social network?</p> <ul style="list-style-type: none"> <li>a) The overall number of users and the active users is likely to be a more meaningful metric when making decisions on choosing a social network</li> <li>a) Data like where are the customers can also influence choosing a social network</li> <li>b) Both a and b</li> <li>c) None of the above</li> </ul>	2	CO2
Q 29	<p>Social media authors who recommended against using a certain product or service to others in one of their posts are called:</p> <ul style="list-style-type: none"> <li>a) Advocate</li> <li>b) Manager</li> <li>c) User</li> <li>d) Detractor</li> </ul>	2	CO4
Q 30	<p>With the help of good social _____ tool, brands can quickly access huge information on online mentions about a certain topic, analyze and then use them to make predictions.</p> <ul style="list-style-type: none"> <li>a) Listening</li> <li>b) Documenting</li> <li>c) Usage</li> <li>d) monitoring</li> </ul>	2	CO5
<b>SECTION B</b>			
Q 31	<p>Justify the statement “Social Media Optimization causes brand awareness through social media platforms, social news buttons, microblogging or incorporating images and video”. Explain the benefits of social media optimization.</p> <p style="text-align: center;"><b>OR,</b></p> <p>“Social media audits are vital for the success of the brand’s means of effective communication when using popular sites such as Facebook, Twitter, YouTube and Google+.” Comment.</p>	10	CO4
Q 32	<p>Examine the future of social media analytics and monitoring. State some guidelines for social media data to make better business decisions.</p> <p style="text-align: center;"><b>OR,</b></p>	10	CO5

	Elaborate the benefits of social media integration into an organization and mention the four integration modes.	10	
<b>SECTION-C</b>			
Q 33	<p>Ordering a pizza nowadays is a piece of cake, isn't it? Well, it is for end users. Let's say, you are browsing your Facebook feed, you see Dominos has 1+1 offer for Wednesday. You are like whatever, I am not ordering today. Then you are watching a video on YouTube, Dominos shows its mouth-watering cheese burst pizza, you are tempted, but you still are saying no. Finally you meet your friend in the evening and decide to have dinner outside. Now the place on top of your mind is dominos and you hit the store. Well, Dominos got you!</p> <p>There were multiple influencing stages in your purchase and there are millions of people out there who follow numerous stages. It is crucial for Dominos to connect and analyze users' cross-channel &amp; cross-device behavior and also connect online and offline behavior.</p> <p>That's what they did with Google analytics 360 product and partnership with DBI (Digital Business Intelligence) company. Though Dominos has world class analytics solutions to measure their every marketing effort, these were in silos. Dominos knew there is a big ocean of opportunities available once they eradicate these silos and merge them. That's what they did with Google Big Query. DBI developed a custom Big Query Solution for Dominos to store and fetch massive data of Dominos. It also helped Dominos to connect their analytics and CRM data seamlessly to connect online &amp; offline data.</p> <p>a) How do you think dominos could have achieved an increase in the monthly revenue by 6%?  b) Examine how dominos could have reduced the ad spending cost by 80% year on year?</p>	5+5	CO1, CO3
Q 34	<p>Cab aggregator is a new business concept in India. Today we have Ola, Uber, Taxi for Sure etc. which not only compete to provide better service to customers but also design more consumer friendly price structures. Gone are the days, when your trip cost only depended on the number of kilometers. Today it depends on a number of factors making it confusing enough to puzzle customers and the drivers. Here are a few charges you might see on your hired taxi's invoice :</p> <ol style="list-style-type: none"> <li>1. <b>Base Fare:</b> Initial amount billed to sit in a cab</li> <li>2. <b>Excess km fare:</b> Billed amount on distance after complimentary ride</li> <li>3. <b>Time fare:</b> Billing on the time spent in the cab</li> <li>4. <b>Minimum fare:</b> This is the minimum amount you will be billed</li> </ol>		

5. **Tolls and excess fee:** This is the excess charge you need to pay to compensate for the long distances outside main city
6. **Taxes:** Taxes is are over and above the bill
7. **Premium multiplier:** In crowded/congested time, you will be bill something like 1.4 – 2.5 X of the actual bill amount.

There are four categories of taxis:

Micro: Super small taxi like Nano/E2O etc.

Mini: These are hatchback options like Tata Indica.

Sedan: These are Sedan options like Toyota Etios.

Luxury: These are super luxurious cab options like Mercedes, BMW etc

### Aggregator 1:




**Ola:** They have three category for Taxis : 1. Micro , 2. Mini , 3. Prime

Standard Rate				
Category	Minimum Bill	Extra km charges	Wait time charges	Ride time charges
Micro**	Rs 40	Rs 8 per Km	N/A	Rs 1 per Min
Prime**	Rs 100 for first 4 Km	Rs 13 per Km	N/A	Rs 1 per Min (Post 5 Min)
Mini**	Rs 80 for first 4 Km	Rs 10 per Km	N/A	Rs 1 per Min (Post 5 Min)

In addition to this, minimum fare of Micro is fixed at Rs. 50.

### Aggregator 2:

**Taxi For Sure:** They also have 3 categories of Taxis as shown:

CAR	FARE
 Nano	₹35 ( ₹5.0/km, ₹ 1.5/min of trip time)
 Tata Indica AC	₹49 ( ₹6.0/km after 2.0kms, ₹ 1.5/min of trip time)
 Sedan	₹75 ( ₹8.0/km after 2.0kms, ₹ 1.5/min of trip time)

### Aggregator 3:

**Uber:** It does not have a micro option but has a luxury as well called XL in addition to mini and sedan.



uberGO



Base fare: ₹35  
Cost per min.: ₹1  
Cost per km: ₹7  
Service fee: ₹0  
Cancellation fee: ₹50

uberX



Base fare: ₹40  
Cost per min.: ₹1  
Cost per km: ₹8  
Service fee: ₹0  
Cancellation fee: ₹75

uberXL



Base fare: ₹100  
Cost per min.: ₹2  
Cost per km: ₹17  
Service fee: ₹0  
Cancellation fee: ₹150

**Assumptions:**

- 1) For all trips assume that every km journey will be completed in 4.5 minutes.
- 2) No toll to be assumed in all the trips.
- 3) No Taxes are applied for simplicity.
- 4) Multipliers are applied on final bill amount.
- 5) Cancellation charges cannot be waived off if the booking has been made.

**Rest you can assume any missing value or algorithm you want to apply here.**

Based on the above case study and assumptions, answer the following questions:

- a) Which of the MICRO vehicles will be cheapest if your distance lies between 1 to 8 kms?
- b) Which MINI vehicles are the cheapest if your distance is between 1 to 10 kms?
- c) If you get a free upgrade from Ola Micro to Mini, will it be cheaper than Uber Mini for distance 2-6 kms?
- d) Uber is charging a multiplier of 2.1 and Ola is charging a multiplier of 1.4 on their Sedan Vehicles (Ola Prime vs. UBER X). Which one will cost less?
- e) You have already booked UberGo for a multiplier of 1.5 and now you are getting a Ola Mini vehicle without peak charges? The challenge is that if you cancel an Uber you will incur a cancellation charge penalty. However, if you choose to cancel, you stand a chance to save on peak charges for Uber. At what distance will you break even on the cancellation charges on Uber, in case you choose to go ahead with Ola?

5\*2

Case Study