## JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA <br> PGDM / PGDM (M) / PGDM (SM) <br> FIFTH TRIMESTER (Batch 2020-22) <br> END TERM EXAMINATION, January-2022 <br> SET A

| Course Name | Social and Networks Analytics | Course Code | BA-502 |
| :--- | :--- | :--- | :--- |
| Max. Time | $\mathbf{2}$ hours | Max. Marks | $\mathbf{4 0}$ |

## INSTRUCTIONS:

a. This is a closed book Exam.
b. All questions are compulsory.
c. The maximum plagiarism percentage allowed would be less than equal to $20 \%$.
d. A penalty will be applicable for breaching plagiarism more than $20 \%$.
(Plagiarism penalty rules are as follows: -
$>20 \%$ to $<=30 \%$ will lead to 5 marks deduction
$>30 \%$ to $<=40 \%$ will lead to 10 marks deduction and
$>40 \%$ will lead to 15 marks deduction)
e. Read the questions carefully and provide precise and point-wise answers.

Q1: The NRC sentiment analysis of Organic Food Brands in India "Pro-Nature" versus "Organic Tattva", as derived from all tweets from the Twitter platform is presented below (Figure1 and Figure2). Explain how any new entrant into the organic food market can use these sentiment scores. Explain what other insights can be obtained by using text analytics to examine the reviews on a granular level, by making assumptions on the data. Describe the challenges in sentiment analysis faced by companies.

## Sentiment scores of Pro-Nature



Figure1: Sentiment score of Pro-Nature


Figure2: Sentiment score of Organic Tattva

Q2: An international travel website wants to know how it can give knowledgeable tourists individualized recommendations by going beyond star ratings for hotels, spas, motels, bed \& breakfasts, and other similar places. It's difficult to stay up with shifting trends in the travel industry when there's so much competition and so many discriminating clients. They need to promote themselves on various social media platforms like LinkedIn, Facebook and Instagram. The
organization must ensure that it can transform millions of hotel reviews into nuggets of key information, allowing clients to plan their entire trip rather than just their stay. They want to measure, analyze and understand metrics on their social networks to provide them meaningful insights. Explain different social metrics, which they will get and how they would utilize these insights in generating awareness among their target customers. ( $\mathbf{1 0}$ marks).

Q3: Answer the following ( $\mathbf{5}+\mathbf{5}$ marks)
a) ABC consultancy deals with SAT preparation. Explain which social media platform they should use to promote their organization. Justify your answer by taking certain assumptions.
b) Discuss the different social media analytics tools available in the market and compare their strengths and weakness.

Q4: Answer the following
a) Social networking analysis (SNA) is being increasingly used by organizations. Briefly explain how it can be used to analyze and solve business-related problems. ( 6 marks)
b) Consider the following NodeXL files. The Vertices sheet has the following entries (4 marks)

Vertex<br>Ajay<br>Bharati<br>Chanchal<br>Dheeraj<br>Elangovan<br>Farida<br>Grishma<br>Harkirat<br>Imran<br>James

The Edges sheet in the NodeXL file has the following entries.

| Vertex1 | Vertex2 |
| :--- | :--- |
| Ajay | Bharati |
| Ajay | Chanchal |
| Ajay | Dheeraj |
| Ajay | Farida |
| Bharati | Dheeraj |
| Bharati | Elangovan |
| Bharati | Grishma |
| Chanchal | Dheeraj |
| Chanchal | Farida |
| Dheeraj | Elangovan |
| Dheeraj | Farida |


| Dheeraj | Grishma |
| :--- | :--- |
| Elangovan | Grishma |
| Farida | Grishma |
| Farida | Harkirat |
| Harkirat | Imran |
| Imran | James |
| Grishma | Harkirat |

b. 1 Based on the two sheets, draw a network (in Ms-Word or on a plain sheet of paper) that satisfies the Vertex and Edges sheets given above and paste its screenshot in the answer sheet.
b. 2 Identify which of the above vertices is best defined as the hub of the network? Why?
b. 3 Identify which of the above vertices has the best location in the network? Justify.
b. 4 Identify which of the above vertices has the shortest path to all other vertices? Justify.
$* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *$

