| A Reg. No. : |  |  |  |  |  |  |  |  |  |  |
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## **Question Paper Code: 99C78**

## B.E./B.Tech. DEGREE EXAMINATION, MAY 2024

Open Elective

Civil Engineering

## 19UCB978 SOCIAL NETWORK ANALYSIS

|     | (Common to CSE                             | ECE, EEE, EIE, Mec<br>Biotechno                                       | hanical, IT, Chemic logy branches) | al, Agri, Bio  | medical, &        |   |  |
|-----|--|---|------------------------------------|----------------|-------------------|---|--|
|     |  | (Regula   | ations 2019)                       |                |                   |   |  |
| Dur | ation: Three hours                         |   |                                    | Maxim          | um: 100 Marks     |   |  |
|     |  | Answer A  | All Questions                      |                |                   |   |  |
|     |  | PART A - (1)  | $0 \times 1 = 10 \text{ Marks}$    |                |                   |   |  |
| 1.  | Who is owner of Go                         | oogle?.   |                                    |                | CO1-U             | J |  |
|     | (a) Sergey Brin and                        | Larry Page  | (b) Steve Chen Jawed Karim,        |                |                   |   |  |
|     | (c) Mark belly, Cha                        | d Hurley,   | (d) none of                        | f the above    |                   |   |  |
| 2.  | Who is CEO of Tikt                         | ak?.  |                                    |                | CO1-U             | J |  |
|     | (a) Shou Zi Chew                           | (b) Steve Chen  | (c) Mark belly                     | (d) none or    | f the above       |   |  |
| 3.  |  | a way to have the se<br>e the model that will s                       | •                                  | one security   | CO1-U             | J |  |
|     | (a) Simplicity                             | (b) Defence in Dep  | th (c) Fail-s                      | safe Stance    | (d) Understand    |   |  |
| 4.  | Who is father of Bl                        | ogging?   |                                    |                | CO1-U             | J |  |
|     | (a) Justin hall                            | (b) Steve Chen  | (c) Mark belly,                    | , (d) 1        | none of the above |   |  |
| 5.  | URLs per unit time for finding interesting | ts the amount of disagnets. A stable community and changes around the | on a topic is the betopic.         | est starting p | point             | J |  |
|     | (a) Growth Rate                            | (b) Stability (c) I   | Evolution Metrics                  | (d) none of    | the above         |   |  |

6. List out the changes in web community

CO1-U

(a) emerge, dissolve, split, merge, Growth and Shrink (b) emerge, dissolve, split, merge

(c) emerge, dissolve, Growth and Shrink (d) none of the above

| 7.  | List<br>netv |                                       | for feature set cor                              | ıstructı | on in link prediction          | ı socıal |              | COI-U |
|-----|--------------|---------------------------------------|--|----------|--------------------------------|----------|--------------|-------|
|     | (a) r        | node neighborhoo                      | d (b) path base                                  | ed       | (c) none of the a              | bove     | (d) both a   | ı & b |
| 8.  | Firs         | t challenge for su                    | pervised link pred                               | iction   |                                |          |              | CO1-U |
|     | (a) s        | snewkess                              | (b) skewness                                     | (c) ex   | xtreme class of skew           | ness     | (d) none     |       |
| 9.  | List         | out the emotion of                    | occur in datasets                                |          |                                |          |              | CO1-U |
|     | (a) s        | surprise                              | (b) sadness                                      | (c) th   | ankfulness                     | (d) all  | of the above | ve    |
| 10. | Who          | o is CEO of twitte                    | er?  |          |                                |          |              | CO1-U |
|     | (a) J        | Jack Dorsey                           | (b) Elon musk                                    |          | (c) Evan Will                  | iams     | (d) Mark     | belly |
|     |              |                                       | PART – B   | (5 x 2   | = 10Marks)                     |          |              |       |
| 11. | Wha          | at are the levels of                  | f Social Network a                               | nalysis  | ?                              |          |              | CO1-U |
| 12. | List         | out the Applicati                     | ons of Random Wa                                 | alks on  | Graphs?                        |          |              | CO1-U |
| 13. |              | out the attribut<br>munity obtains or |  | epresen  | nt how many URLs               | s the f  | Cocused      | CO1-U |
| 14. | List         | out the mechanis                      | m used in homoph                                 | ily      |                                |          |              | CO1-U |
| 15. | Men          | ntion the filters in                  | n datasets                                       |          |                                |          |              | CO1-U |
|     |              |                                       | PART –   | C (5 x   | 16= 80Marks)                   |          |              |       |
| 16. | (a)          | What is the purp<br>Semantic web?     | pose of Semantic V                               | Web?     | how to explain abo             | out the  | CO1-U        | (16)  |
|     | <i>(</i> 1.) |                                       | 0  |          | TT . D 1 . 1                   | 1        | CO1 II       | (1.6) |
|     | (b)          | Html Forms?                           | used in Semantic                                 | web?     | How to Explain abo             | out the  | COI-U        | (16)  |
| 17. | (a)          | Design a table w                      | vith Student Mark l                              | ist Usi  | ng Html and Externa            | ıl       | CO2-App      | (16)  |
|     |              |                                       | O  |          |                                |          |              |       |
|     | (b)          | Design a table E                      | EB Bill Form Using                               | Html     | and internal CSS               |          | CO2-App      | (16)  |
| 18. | (a)          |                                       | ail about the aggre<br>th respect to on the<br>O | notion   | and reasoning with of equality | social   | CO1- U       | (16)  |
|     | (b)          |                                       | Community? How n a series of Web A               |          | tract the evolution o          | f Web    | CO1- U       | (16)  |

| 19. | (a) | Describe the Link Prediction in Social Networks              | CO1- U | (16) |
|-----|-----|--|--------|------|
|     |     | Or   |        |      |
|     | (b) | Explain about brief in Feature based Link Prediction         | CO1- U | (16) |
| 20. | (a) | Describe in detail about the Emotion model                   | CO1- U | (16) |
|     |     | Or   |        |      |
|     | (b) | Write a shorts note on New Linguistic Approach to Assess the | CO1- U | (16) |
|     |     | Opinion of Users in Social Network Environments              |        |      |