



Model Questions

SKR/KW/24/2667/2673/2680/2686

Faculty of Science & Technology
Eighth Semester B. Tech. Computer Science & Engineering/CE/IT/CT (CBCS) Examination
SOCIAL NETWORKS
PROG ELE - VI

Time—Three Hours]

[Maximum Marks—70

INSTRUCTIONS TO CANDIDATES

- (1) All questions carry marks as indicated.
- (2) Solve Question No. **1 OR** Question No. **2**.
- (3) Solve Question No. **3 OR** Question No. **4**.
- (4) Solve Question No. **5 OR** Question No. **6**.
- (5) Solve Question No. **7 OR** Question No. **8**.
- (6) Solve Question No. **9 OR** Question No. **10**.
- (7) Due credit will be given to neatness and adequate dimensions.
- (8) Assume suitable data whenever necessary.
- (9) Illustrate your answers whenever necessary with the help of neat sketches.

1. (a) What is Social Network ? Explain in brief. 7
- (b) Explain in detail social network dataset. 7

OR

2. (a) Explain Google page rank in detail. 7
- (b) What are the different social network challenges ? Explain. 7
3. (a) Explain marketing on Social Networks. 7
- (b) Explain different types of Searching in a network. 7

OR

4. (a) Explain about Dijkstra's algorithm 7
- (b) What is Synonymy Network ? Explain in detail. 7
5. (a) Describe in detail about data set analyzing using graph. 7
- (b) Write short note on Graph partitioning. 7

OR

**Model Questions**

6. (a) Differentiate between strong ties and weak ties. 7
(b) Describe in detail about data set analyzing using Networkx. 7
7. (a) Describe about Structural balance. 7
(b) Explain about Community Detection Using Girvan Newman Algorithm. 7
- OR**
8. (a) Discuss about Strong and Weak Relationship in Social Network. 7
(b) Explain Rich-Get-Richer Phenomena in detail. 7
9. (a) Explain selection and social Influences in detail. 7
(b) Explain Modelling diffusion in detail. 7
- OR**
10. (a) Write a short note on Web graph. 7
(b) Explain about the small world Phenomenon. 7



Model Questions

PRS/KS/24/2944/2950/2956/2962

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 - (6) Solve question **9 OR** question No. **10**.
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1. (a) Explain Social Network in detail. 7
(b) Explain the challenges in social network. 7
- OR**
2. (a) What are the social network dataset ? 7
(b) Explain searching in network. 7
 3. (a) Explain Granovetter's strength of weak ties. 8
(b) Explain validation of Granovetter's experiment using cell phone data. 6
- OR**
4. (a) Explain community detection using Girvan Newman algorithm. 8
(b) Explain search the communities in a graph by using brute force method. 6
 5. (a) Explain Fatman Evolutionary model the base code for adding a people. 7
(b) Explain Spatial Segregation. 7
- OR**
6. (a) Explain Schelling Model Implementation in detail. 8
(b) Explain positive and negative relationship with respect to social network. 6
 7. (a) Explain the fact Enemy's Enemy is a Friend. 8
(b) Explain Rich-Get-Richer Phenomena in detail. 6
- OR**
8. (a) Explain fact equal coin distribution. 6
(b) Explain how to find Google page ranking using web graph. 8
 9. (a) Compare relationship between Degree Rank Vs Page Rank. 6
(b) Explain Modelling diffusion in detail. 8
- OR**
10. (a) Explain impact of communities on diffusion. 6
(b) Explain small world phenomenon in social network. 8

MH—610

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