

Seat No.: \_\_\_\_\_

**NATIONAL FORENSIC SCIENCES UNIVERSITY**  
M.Tech. Cyber Security - Examination  
August 2022

Enrolment No. \_\_\_\_\_

Subject Code: CTMTCS SII P5 EL4  
Subject Name: Social Network Analysis  
Time: 11:00 AM - 2:00 PM

Date: 05/08/2022

Total Marks: 100

**Instructions:**

1. Write down each question on a separate page.
2. Attempt all questions.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

		Marks
<b>Q.1</b>	(a) Explain the difference between social media and social network.	05
	(b) Write different facilities of well-known social network sites e.g. like, comments etc.	05
	(c) Write a short note on maintaining security and privacy on various social network platform e.g. Facebook, LinkedIn and Twitter. OR Write a note on graph theory.	07
<b>Q.2</b>	(a) What is fake news and how to investigate online social media?	05
	(b) Explain API integration with social media tools and its effectiveness in investigation.	05
	(c) Write any case study on social media fake profile investigations.	07
<b>Q.3</b>	<b>Write any Two Answer</b>	
	(a) What is the surface web, deep web, and dark web with example?	08
	(b) What is OSINT? Explain different types of intelligence gathering methods using OSINT techniques.	08
	(c) Explain different components of graph theory like nodes, edges, structures etc.	08
<b>Q.4</b>	(a) Explain multimedia metadata with appropriate example.	05
	(b) What is multi-factor authentication? Explain with an example.	05
	(c) What is OSINT-based malware analysis? Write a case study on OSINT-based malware analysis.	07
<b>Q.5</b>	(a) What do you mean by internet archive? Explain with an example.	05
	(b) What is web crawling? Explain with an example.	05
	(c) How google search is working? Explain Google Dorks. Or Explain OSINT Framework.	07
<b>Q.6</b>	<b>Write any Two Answer</b>	
	(a) Write a case study on IP Based, Domain based, Username Based and Email based investigations using leaked data sources.	08
	(b) Explain OSINT life cycle in detail.	08
	(c) Explain emerging trends and disruptive technologies in the field of social media and social networks.	08