



R20 Regulation

Subject code: 3E7HB

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

## B.Tech VII Semester Regular Examinations, November 2023

### CYBER SECURITY (CSE (DATA SCIENCE))

Maximum Marks: 70

Date: 06.12.2023 Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

#### Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

Bloom  
Tx

1	What are the three key principles of the CIA Triad in Cyber Security, and why are they important?	L1
2	Write the difference between active attacks and passive attacks in the context of cyber security.	L1
3	What is the significance of the National Cyber Security Policy in the context of India's cyberspace?	L1
4	Define cyber forensics and explain its importance in the field of digital investigations.	L1
5	Define the terms Mishng, Vishng.	L1
6	What are some common attacks on mobile and cell phones?	L1
7	What is Data Breach? Write its implications.	L1
8	List few common Web Application Vulnerabilities.	L1
9	What are the fundamental concepts of data privacy, and why are they important in the digital age?	L1
10	Write about Recording Key Strokes.	L1

#### Part-B

Answer All the following questions.

(5X10M=50Marks)

11	A. Discuss the difference between software and hardware attacks in the realm of cyber security. (5M) B. Analyze the concept of IP spoofing and its role in cyber-attacks. (5M)	L2 L4
	OR	
12	A. Discuss various methods to defend against IP spoofing in the context of cyber security. (6M) B. Describe the elements of a comprehensive cyber security policy (4M)	L2 L2
13	A. Describe the digital forensics lifecycle, including its key phases, activities and applications. (6M) B. How does digital evidence play a crucial role in cyber forensics? (4M)	L2 L4

	OR	
14	A. How do the special techniques help in uncovering financial irregularities and fraud, and give some examples of such techniques? (7M) B. List common sources of digital evidence? (3M)	L4 L1
15	A. Discuss different types of mobility and their implications. (5M) B. Analyze the role of registry settings play in configuring and securing mobile devices? (5M)	L2 L4
	OR	
16	A. Examine the security challenges posed by mobile devices. (6M) B. Write short notes on malware, phishing attacks. (4M)	L2 L1
17	A. How can organizations safeguard their digital intellectual property from theft or compromise? (6M) B. What are the typical characteristics and skills of hackers and other cyber criminals, and how do they operate? (4M)	L4 L2
	OR	
18	A. Discuss the strategies that organizations can employ to detect and prevent cybercrimes. (6M) B. What are the essential controls to be employed to prevent unauthorized access? (4M)	L2 L2
19	A. Discuss briefly about various Data Privacy Attacks. (7M) B. List any four Privacy policy languages. (3M)	L2 L1
	OR	
20	A. Explore the practices of data linking and profiling. (6M) B. What is Privacy policy and explain their specifications? (4M)	L2 L2