(FOR THE CANDIDATES ADMITTED

DURING THE ACADEMIC YEAR 2022   ONLY)   REG.NO.

22UCS516

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : NOVEMBER 2024

BSC-COMPUTER SCIENCE(AIDED & SF)   MAXIMUM MARKS: 50

SEMESTER-V   TIME : 3 HOURS

PART – III
22UCS516– CYBER SECURITY
SECTION – A   (10 X 1 = 10 MARKS)
ANSWER THE FOLLOWING QUESTIONS.   (K1)

1. Which of the following is not a common Security Attack?

    a) Phishing   b) Eavesdropping   c) Load Balancing   d) Denial of Service (DoS)

2. Which security mechanism is used to ensure Data Integrity?

    a) Symmetric Key Encryption   b) Digital Signatures c) Public Key Encryption   d) Data Masking

3. Which of the following is not typically a function of an Intrusion Detection System (IDS)?

     a) Monitoring network traffic   b) Encrypting data

     c) Analyzing system logs   d) Detecting unusual activity

4. Which of the following is the primary goal of Network Management?

    a) Data encryption

    b) Ensuring efficient network operation and performance

    c) User authentication

    d) Malware removal

5. Which of the following is a common threat faced by organizations with Electronic Mail?

    a) Data encryption

    b) Phishing attacks

    c) Firewall configuration

    d) Backup procedures

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES   (K2)
6. Why is physical security important in network management?

7. What is the role of Encryption in Database Security?

8. Define Access Control in the context of Network Security.

9. What is the purpose of a Security Plan in Security Management?

10. Why is it important to have an Email Policy in an Organization?

ETHICAL PAPER

SECTION – B   (5 X 3 = 15 MARKS)
ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.   (K3)

11.   a) Brief out the three main types of Security Attacks.
(OR)
b) Describe the role of Standards and Guidelines in Organizational Security.

12.   a) Differentiate between Secret Key Cryptography and Public Key Cryptography.
(OR)
b) List and describe three Database Security Issues.

13.   a) Explain the two types of Intrusion Detection Systems (IDS).
(OR)
b) Explain the concept of a Firewall and its primary function in Network Security.

14.   a) List and provide a brief overview of two Infrastructure elements necessary for Network
Management.   **(OR)**
b) What is Change Management in the context of Security Management? Explain.

15.   a) Identify and describe two email Threats that Organizations face.
(OR)
b) Describe the schematic flow of Internet Banking.

SECTION – C   (5 X 5 = 25 MARKS)
ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.(K4 (Or) K5)

16.   a) Discuss the principles of network security and how they help in securing a network.
(OR)
b) Explain the process of building a security plan for an Organization.

17.   a) Explain how Public Key Cryptography works and provide an example of its use.
(OR)
b) What are the common characteristics of a database approach, and how do they contribute to
Security?

18.   a) Discuss the infrastructure of an Intrusion Detection System (IDS) and its components.
(OR)
b) Analyze the impact of malicious Software on Network Security and explain its types.

19.   a) Discuss the role of Simple Network Management Protocol (SNMP).

(OR)
b) Explain the Security Management process, and the steps involved in Security Plan.

20.   a) Describe the process in creating an effective Email Policy for an Organization.
(OR)

b) Discuss the key aspects of Securing Internet Banking Systems using a Layered Security
Approach.

ETHICAL PAPER   ***********************