PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 2025
(Sixth Semester)

Branch – NETWORKING AND MOBILE APPLICATION

NETWORK PRIVACY & SECURITY

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 x 1 = 5)

1   Which of the following is NOT a type of network security threat?
    (i)   Denial of Service (DoS) Attack
    (ii) Phishing
    (iii) Firewall
    (iv) Man-in-the-Middle (MitM) Attack

2   What is the primary purpose of an Intrusion Detection System (IDS)?
    (i)   To prevent unauthorized access by blocking traffic
    (ii) To detect and alert administrators about suspicious activities
    (iii) To encrypt network communications
    (iv) To create a secure connection over the internet

3   In cryptography, which encryption method uses a single key for both encryption
    and decryption?
    (i)   Asymmetric Encryption   (ii) Public Key Encryption
    (iii) Symmetric Encryption   (iv) Hashing

4   Which of the following is a common privacy concern associated with data mining?
    (i)   Data Encryption
    (ii) Unauthorized Data Collection and User Profiling
    (iii) Firewall Bypassing
    (iv) Secure Socket Layer (SSL) Implementation

5   Which legal issue is concerned with software defects causing financial or
    operational harm?
    (i)   Copyright Infringement   (ii) Insider Threats
    (iii) Cyber Terrorism   (iv) Redress for Software Failures

SECTION - B (15 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks   (5 x 3 = 15)

6   a   Compare the terms threat, harm, vulnerability, and control in computer security
        with an example.
                            OR
    b   Summarize the importance of authentication in security

7   a   State and briefly describe the three common types of browser attacks.
                            OR
    b   Describe email attacks, and explain how can attackers exploit email
        vulnerabilities?

8   a   Analyze the security challenges in a wireless network compared to a wired
        network.
                            OR
    b   Outline the common threats to network communications, and how do they
        impact data transmission?

9   a   Compare Intrusion Detection System (IDS) and Intrusion Prevention System (IPS).

OR

    b   Explain the concepts of reliability and integrity in database security

10 a   Bring out the different privacy concepts in computer security, and their importance in network security.

OR

    b   Summarize the legal protections available for programs and data under cyber security laws.

SECTION -C (30 Marks)
Answer ALL questions
ALL questions carry EQUAL Marks   (5 x 6 = 30)

11 a   Classify the different cryptographic techniques used in modern security systems.

OR

    b   Discuss the Access control mechanisms in detail.

12 a   Justify how malicious code can exploit programming oversights to compromise security.

OR

    b   Point out the key security features in modern operating systems that protect against threats like unauthorized access and malware.

13 a   Discover the different types of network security threats and suggest possible countermeasures.

OR

    b   Differentiate between Denial of Service (DoS) and Distributed Denial of Service (DDoS) attacks.

14 a   Discuss the function of firewalls in network security and how they help prevent cyberattacks.

OR

    b   Explain the various security requirements of a database and how they help protect sensitive data.

15 a   Discuss email security threats and suggest measures to ensure safe email communication.

OR

    b   Describe ethical challenges in computer security and suggest best practices to handle them.

Z-Z-Z   END