PUBV(S-V) — BCA
(DSE – 2)

2024

Time : 3 hours

Full Marks : 70

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from **all** the Groups as directed.

(Information Security)

Group – A

(Objective Type Questions)

1. Choose the correct answer of the following :

$$1 \times 5 = 5$$

(a) DES means :

(i)   Data Encoding Scheme

(ii) Data Encryption Standard

(iii) Digital Encryption Standard

(iv) None of these

(Turn over)

(b) Which is not an objective of network security ?

    (i) Identification   (ii) Authentication

    (iii) Access control   (iv) Lock

(c) Which of these is a part of Network indentification ?

    (i) User ID   (ii) OTP

    (iii) Password   (iv) Fingerprint

(d) A(n) Algorithm transform Cipher text to plain text :

    (i) Encryption   (ii) Decryption

    (iii) Either (i) or (ii)   (iv) None of these

(e) Which one of the following usually used in the process of Wifi hacking ?

    (i) Aircracking   (ii) Wire shark

    (iii) Norton   (iv) All of these

2. Fill in the blanks :   1×5 = 5

(a) Lock of Access Control Policy is a _____.

(b) The release of message contents and traffic analysis are two types of _____.

(c) The OSI Security Architecture focuses on security attacks _____ and services.

(d) Digital signature is a _____

(e) Information security threats can be _____.

Group – B

(Short-answer Type Questions)

3. Answer any **four** questions of the following (Answer to be not more than **200** words) :

                  5×4 = 20

(a) What are the types of Computer criminals ?

(b) Explain the types of security.

(c) Describe the major application of cryptography.

(d) Explain the need of decryption.

(e) Description the benefits of firewall.

(f) Explain any **two** of the following :

    (a) Cyber security

    (b) File protection

    (c) Cyber crime

    (d) Hash function

Group – C

(Long-answer Type Questions)

4. Answer any **four** questions of the following :

$$10 \times 4 = 40$$

(a) What are the top five information security challenges ?

(b) Describe the Security Architecture in Information security.

(c) What is Cryptography ? Discuss the architecture authentication models used in cryptography.

(d) Explain in details the different types of threats.

(e) Explain the Digital signature and Digital certificate.

(f) Explain any **two** of the following :

   (i) Response code

   (ii) Data leakage

   (iii) Transposition cipher

   (iv) Salami Attack

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