

**2023**

**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 Sections as directed.*

**Section – A**

**(Objective Type Questions)**

1. Choose the correct answer of the following :

$1 \times 5 = 5$

(a) Which of the following networking device is called as protocol converter ?

(i) Repeater

~~(ii) Gateway~~

(iii) Firewall

(iv) Switch

(b) DES means :

- (i) Data Encoding Scheme
- (ii) Data Encryption Standard
- (iii) Digital Encryption Standard
- (iv) None of these

(c) A(n) \_\_\_\_\_ algorithm transform cipher text  
to plain text.

- (i) Encryption
- (ii) Decryption
- (iii) Either (i) or (ii)
- (iv) None of these

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

- (i) Identification
- (ii) Authentication
- (iii) Access Control
- (iv) Lock

(e) Which of these is a part of Network Identification ?

- (i) User ID
- (ii) Password
- (iii) OTP
- (iv) Finger print

2. Fill in the blanks of the following :  $1 \times 5 = 5$

- (a) The Information that gets transferred in encryption is \_\_\_\_\_.
- (b) Information security threats can be \_\_\_\_\_.
- (c) Fire is an example of a \_\_\_\_\_ Information Security Threats.
- (d) Digital signature is a \_\_\_\_\_.
- (e) \_\_\_\_\_ is the concept of sharing resources services and application.

### Section – B

#### (Short-answer Type Questions)

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

$5 \times 4 = 20$

- (a) What are the types of computer criminals ?
- (b) What are major application of cryptography in Modern World ?
- (c) What are the five types of security ?
- (d) What is main objective of cyber security ?
- (e) What is data base security profile ?
- (f) Explain the Administrative Security.

## Section – C

### (Long-answer Type Questions)

4. Answer any four questions of the following :

$$10 \times 4 = 40$$

- (a) What is decryption ? What is its need ?
- (b) Explain the database security and its types.
- (c) What are benefits of firewall ?
- (d) What are the top five information security challenges ?
- (e) Describe the Security Architecture in Information Security.
- (f) Explain the following :
- (i) Multi level security
  - (ii) Hash function
  - (iii) Salami Attack
  - (iv) File Protection