

**18026**

**B.C.A. Examination, June-2023**  
**COMPUTER NETWORK SECURITY**  
**(BCA-601)**

*Time : 3 Hours*

*[Maximum Marks : 75]*

**Note :** Attempt questions from *all* the sections as per instructions.

**Section A**

**(Very Short Answer Questions)**

**Note :** Attempt *all* questions. Each questions carries 3 marks. Very short answer is required.

5×3=15

1. Differentiate Encryption and Decryption. 3
2. Write down the principles of Security. 3
3. Explain various types of viruses. 3
4. What is Digital Signature? 3
5. Name four factors needed for a secure network. 3

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**Section-B**

**(Short Answer Questions)**

**Note :** Attempt any *two* questions out of the following three questions. Each question carries 7.5 marks.

6. What is firewall? Describe how firewall can be used to protect the network. 7.5
7. Explain SSL protocol. List the services provided by SSL record protocol. 7.5
8. What is Intrusion Detection? Write some measures used for Intrusion Detection. 7.5

**Section-C**

**(Long Answer Questions)**

**Note :** Attempt any *three* questions out of the following five questions. Each question carries 15 marks. Answer is required in detail.

9. Discuss RSA Algorithm with a suitable example. 15
10. What is the purpose of X.509 standard? How is an X.509 certificate revoked? 15

(3)

11. Discuss different cryptographic Algorithms used in S/MIME. Explain how S/MIME is better than MIME.

15

12/ (a) Explain the role of digital Signatures in the Modern Communication. 10

(b) Explain briefly about SNMPV3. 5

13. Write short notes on any three :  $3 \times 5 = 15$

(a) Kerberos

(b) VPN

(c) SET

(d) PGP