

1487/VI

B.C.A. (PART-III) EXAMINATION, 2022-23

(Sixth Semester)

0108

Paper : I

BCA-601 : Advance Networks and Network Security

Time : Three Hours]

[Maximum Marks : 70

Note: (i) Answer **Five** Questions in all.

(ii) Question No.1 is **Compulsory**.

(iii) Answer remaining **four** questions, selecting **two** questions from each Section A and B.

(iv) All questions carry equal marks.

1. Answer all parts of the following :

(a) What are the various roles of protocols in computer network ?

(b) What do you mean by cipher text ?

(c) What are the various causes of LAN traffic congestion ?

(d) What are the advantages of routers ?

SECTION - A

2. What are the various phases in establishing a connection oriented session ? Explain with suitable example.
3. Draw the diagram of straight through cable and write its usages.
4. Show that Diffie Hellman key exchange protocol, generates same key between two parties.
5. In CISCO three-layer hierarchical model, discuss the functionalities of various layer.

SECTION - B

6. (a) How valid bit and invalid bit are used in a page table to avoid page corruption in an operating system ?
- (b) What are the various types of firewall ?

7. (a) What do you mean by IDS ?
- (b) Discuss the role of hashing in message integrity.
8. (a) Differentiate between symmetric key cryptography and asymmetric key cryptography.
- (b) What do you mean by anti-virus software ?
What are the different scanning modes in an anti-virus software ?
9. Write notes on any two of the following :
- (a) Socket
- (b) Masquerading
- (c) Man in the middle attack
- (d) Access matrix in security implementation by operating system.

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