

Roll No.

E-3901

B. C. A. (Part II) EXAMINATION, 2021

(New Course)

Paper Fourth

COMPUTER NETWORKS

(BCA-204)

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt any *two* parts from each Unit. All questions carry equal marks.

Unit—I

1. (a) What are the protocols and standards of network ?
- (b) Explain different topologies of computer network with example.
- (c) Write short notes on the following :
 - (i) Transmission Mode
 - (ii) Distributed Processing

Unit—II

2. (a) Differentiate parallel data transmission with serial data transmission.

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- (b) Explain DTE-DCE interface with diagram.
- (c) What is Modem ? What are the modem standards ?

Unit—III

- 3. (a) What are the responsibilities of data link layer ? Explain in detail.
- (b) What are the functions of Network Layer ?
- (c) Explain the role of presentation and application layer of OSI model.

Unit—IV

- 4. (a) Write short notes on the following :
 - (i) HTTP
 - (ii) ARP
- (b) What do you mean by Client Server Model ? Describe in brief TCP and FTP.
- (c) What are IP address classes ? Explain with example.

Unit—V

- 5. (a) What is Cryptography ? Differentiate symmetric key cryptography and asymmetric key cryptography.
- (b) Explain RSA algorithm.
- (c) What do you mean by Digital Signature ? What are the advantages of using digital signature ?