

Roll No. ....

**D-3850**

**B. C. A. (Part II) EXAMINATION, 2020**

**(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) Explain data communication and requirement of networking.
- (b) What do you mean by Topology ? Explain various topologies with suitable diagram.
- (c) Explain the following :
  - (i) Internetworks
  - (ii) Standard Organization

**Unit—II**

2. (a) What is benefit of digital communication over analog communication ?
- (b) Explain DTE-DCE interface with example.

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- (c) What is Modem ? Explain their types. Why are modem standards necessary ?

**Unit—III**

3. (a) What do you understand by ISO ? Write function of layers of OSI reference model.
- (b) What are the various jobs of transport layer ? Explain QoS (Quality of Service) of transport layer.
- (c) What is the benefit of layered architecture ?

**Unit—IV**

4. (a) What is IP address ? Explain the different classes of IP addressing.
- (b) Differentiate OSI reference model with TCP/IP model.
- (c) Explain the following :
- (i) WWW
- (ii) HTTP

**Unit—V**

5. (a) What do you understand by network security and its importance.
- (b) Explain Cryptography. What are symmetric and asymmetric key systems ?
- (c) Explain the following :
- (i) RSA
- (ii) Digital Signature