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.

(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