Roll No. ....

Annual Online Examination 2021
Code No. : A.B.C-294

B.C.A. Part II
COMPUTER APPLICATION
BCA–204
Paper I

[Computer Networks]

Time : Three Hours]   [Maximum Marks : 80

Note : *Section 'A' containing 10 very short answer type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.*

Section 'A'

Answer the following Very Short Answer Type Questions in one or two sentences.   **1×10=10**

1. What are the three fundamental characteristics determine the effectiveness of the data communication system ?

2. Identify the five cmponents of a data communications system.

3. What is Line coding ?

4. List three different techniques in serial transmission.

5. Which layers in the Internet model are the network support layers ?

6. What are the responsibilities of the data link layer in the Internet model ?

7. What is WWW ?

8. What do you mean by protocol ?

9. How is a secrete key is different from private key ?

10. What is PGP ?

Section 'B'

Answer the following Short Answer Type Questions in about 150-200 words :   **4×5=20**

1. What is distributed processing ?

Or

Write short notes on Inter-networks.

2. Define block coding and give its purpose.

Or

Differentiate between serial and parallel data transmission.

3. Write the difference between addresses at the physical and data link layers of the OSI model.

Or

What are the benefits of layered architecture ?

4. Describe architecture of Internet in detail.

Or

Describe the client-server model used in internet.

5. What do you mean by Entity Authentication ?

Or

Explain RSA in brief.

Section 'C'

Answer the following Long Answer Type Questions in about 300-350 words :   **10×5=50**

1. What do you mean by topology ? Explain various topologies with suitable diagram.

Or

What are the various transmission media used in computer networks ? Discuss the wireless transmission media in detail.

2. Compare the two methods of serial transmission. Discuss the advanatage of each.

Or

What do you mean by 56 k modem ? Describe it with suitable diagram.

3. What do you understand by ISO ? How each layer interacts with another layer in OSI reference model ?

Or

Discuss the major functions performed by the Presentation layer and Application layer of the ISO OSI model.

4. What is IP address ? Explain the different classes of IP Addressing.

Or

What is TCP/IP reference model ? Write comparisons between TCP/IP model and OSI model in detail.

5. Define network security and its importance.

Or

Explain Symmetric cryptography.

□ □ □ □ □ d □ □ □ □ □