

S-741

Total Pages : 4

Roll No. -----

BCA-14

Data Communication and Computer Networks

Bachelor of Computer Application (BCA)

5th Semester, Examination 2022(Dec.)

Time: 2 Hours

Max. Marks: 70

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section – A

(Long Answer – type questions)

Note: Section 'A' contains Five (05) long-answer-type questions of Nineteen (19) marks each. Learners are required to answer any two (02) questions only.

[2 x 19 = 38]

P.T.O.

Q.1. Answer the following:

- a. What are the three different modes of transmission? (9 marks)
- b. Explain TCP/IP model in details. (10 marks)

Q.2. Answer the following:

- a. Explain unguided transmission medium. (10 marks)
- b. Explain CRC. (9 marks)

Q.3. Answer the following:

- a. What is Network Interface Card (NIC)? (3 marks)
- b. Define Network Adapters? (3 marks)
- c. What are the various Components of NIC? (6 marks)
- d. What are the functions of NIC? (4 marks)
- e. List and explain various types of NIC. (3 marks)

Q.4. Answer the following:

- a. What is Bluetooth? (3 marks)
- b. Explain Piconet and Scatternet Bluetooth Architecture? (9 marks)
- c. Explain different layers of Bluetooth. (7 marks)

Q.5. Write a short note on the following:

- a. Protocol (2 marks)
- b. BNC connector (3 marks)
- c. Wireless LANs (IEEE 802.11) (4 marks)
- d. Firewall (4 marks)
- e. Search Engine (3 marks)
- f. Intranet (3 marks)

Section – B

(Short-answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.

[4 x 8 = 32]

P.T.O.

- Q.1. Compare analog and digital transmission.
- Q.2. What is the difference between Server Based LANs and Peer-to-Peer LANs.
- Q.3. Explain ISO-OSI Reference Model in detail.
- Q.4. Compare ISO-OSI and TCP/IP Model.
- Q.5. Explain various propagation modes in fiber optics in detail.
- Q.6. What is an Internet Service Providers (ISP)? What are its various types? Explain.
- Q.7. What is an IP address? Explain different classes of IP address.
- Q.8. What is the difference between synchronous and asynchronous communication?
