Bachelor of Computer Applications 5th Semester
(2122)
COMPUTER NETWORKS
Paper : BCA-16-501

Time Allowed : Three Hours]   **[Maximum Marks : 65**

Note :— Candidate is required to attempt **FIVE** questions in all, including Question No. **9** (which is compulsory) and attempt remaining four questions by selecting **ONE** question from each Section.

SECTION—A

1. Differentiate between OSI and TCP/IP reference model in detail

    13

2. Write a note on switching. Explain the components of various switching techniques used for data transmission.   13

SECTION—B

3. Discuss various design issues of data link layer. Explain CRC and Hamming code with example.   13

4. Explain the working of stop and wait ARQ and Go-back-N ARQ protocols with example.   13

SECTION—C

5. Write notes on the following :

   (a) Shortest path routing

   (b) Broadcast and multicast routing.   13

6. What are the congestion prevention policies ? Discuss the working of token bucket and leaky bucket algorithm with example.   13

SECTION—D

7. Discuss the architecture and services of email highlighting role of SMTP.   13

8. What do you understand by DNS ? Write a note on network security and remote login.   13

(Compulsory Question)

9. (a) List uses of MODEM.   3

   (b) Differentiate between Time and Frequency division multiplexing.   2

   (c) What is the significance of dynamic channel allocation ?

   2

   (d) Differentiate between noisy and noiseless channel.   2

   (e) Define sub netting.   2

   (f) Define POP.   2