



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)

MCA 3rd YEAR 5th SEMESTER ASSIGNMENT

Last Date of Submission: 15 Jan, 2015

Course Title: Data Communication and Computer Networks Course Code: MCA-19

Year: 2014-15

Maximum Marks: 40 Marks

Section 'A'

Section 'A' contains 08 short answer type questions of 5 marks each. Learners are required to answer 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

1. What is the File Transfer Protocol? Describe its application.
2. Explain the DNS Namespace with diagram.
3. Explain the concept of a Client Server model.
4. What are the difference between TCP and UDP?
5. Explain Address Resolution Protocol (ARP).
6. Explain the Point-to-Point protocol of the Data link layer.
7. Illustrate the Stop-and-Wait protocol of the Data link layer.
8. Explain the different types of multiplexing techniques.

Section 'B'

Section 'B' contains 04 long answer-type questions of 10 marks each. Learners are required to answer 02 questions only.

1. Answer the following:
 - a. What is the data unit of "Transport layer"? What are the functions of a Transport Layer in OSI Model?
 - b. Explain on Process-To-Process delivery.
 - c. What is User Datagram? Explain the application of UDP and some drawback of UDP.
2.
 - a. Define Routing. What are the different goals of routing algorithm?
 - b. Explain distance vector routing and link state routing.
3.
 - a. What do you understand by Error detection and Error correction in the Data link layer?
 - b. Illustrate with examples three Error correcting codes present in the Data link layer.
4. Write a short note on the following:
 - a. ISO-OSI protocol
 - b. CSMA/CD
 - c. Working of token Ring LAN
 - d. FDDI frame format