



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)
उत्तराखण्ड मुक्त विश्वविद्यालय, हल्द्वानी (नैनीताल)

MCA-11/MCA-16 3rd YEAR 5th SEMESTER ASSIGNMENT

Last Date of Submission: 15 Dec, 2016

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

Year: 2016-17

Maximum Marks: 30/40 Marks

Section 'A'

Section 'A' contains 08 short answer type questions of 4/5 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 meant by Data Communication and explain its characteristics?
2. Explain and compare the characteristics of Guided and unguided Transmission media.
3. Explain briefly the coaxial cable.
4. What are the difference between TCP and UDP?
5. Explain Address Resolution Protocol (ARP).
6. What is meant by virtual circuit?
7. Illustrate the Stop-and-Wait protocol of the Data link layer.
8. Explain about Transport Layer Services.

Section 'B'

Section 'B' contains 04 long answer-type questions of 7/10 marks each. Learners are required to answer 02 questions only.

1. Answer the following:
 - a. Explain Non adaptive versus Adaptive Routing.
 - b. Explain the working of link state routing algorithm with an example.
2. Answer the following:
 - a. Explain about the error detecting and error correcting codes.
 - b. Compare circuit, packet and message switching.
3. Answer the following:
 - a. Define Routing. What are the different goals of routing algorithm?
 - b. Explain distance vector routing and link state routing.
4. Answer the following:

- a. Explain how connections are established using three-way handshake.
- b. Write a detailed note on internet address.

