

CLUSTER UNIVERSITY SRINAGAR

(SYLLABUS)

Course Code	BCA-CR5102
Course Title	Computer Networks
Semester	BCA 5 th Semester
Course Type & Credits	Core Paper - 04 Credits (L) + 02 Credits (T) = 06 Credits

Unit- I

Introduction to computer Networks: network topologies; network classifications; network protocol; layered network architecture; overview of OSI reference model; overview of TCP/IP protocol suite.

Unit -II

Overview of Application layer protocol: Overview of DNS protocol, overview of WWW & HTTP protocol.

Overview of Presentation layer protocol: data conversion, data compression -decompression, data encryption and decryption; format checking

Introduction to session layer: session establishment, session maintaining and session terminating; dialog control; token management; synchronization.

Unit-III

Transport Layer Functions and Protocols: Transport services- error and flow control, Connection establishment and release;

Networks Layer Functions and Protocols: Routing; routing algorithms; network layer protocol of Internet- IP protocol, Internet control protocols. Networks Switching Techniques and Access mechanisms: Circuit switching; packet switching- connectionless datagram switching, connection-oriented virtual circuit switching; three way handshake.

Unit-IV

Data Link Layer Functions and Protocol: Error detection and error correction techniques; data-link control- framing and flow control; error recovery protocols- stop and wait ARQ, go-back-n ARQ; Point to Point Protocol on Internet; CSMA/CD protocols;

Introduction to physical layer: physical media , wired and wireless media ,Repeaters, hubs.

Recommended Readings:

1. B. A. Forouzan: Data Communications and Networking, Fourth edition, THM ,2007.
2. A. S. Tanenbaum: Computer Networks, Fourth edition, PHI , 2002

L = Lecture, P = Practical, T = Tutorial

Forouzan
@Cyballine
on shelf
BNM
1/2/2002