WARNING
1. PLAGIARISM OR HIRING OF GHOST WRITER(S) FOR SOLVING THE ASSIGNMENT(S) WILL DEBAR THE STUDENT FROM AWARD OF DEGREE/CERTIFICATE, IF FOUND AT ANY STAGE.
2. SUBMITTING ASSIGNMENTS BORROWED OR STOLEN FROM OTHER(S) AS ONE’S OWN WILL BE PENALIZED AS DEFINED IN “AIOU PLAGIARISM POLICY”.

Course: Network Design (3418)
Level: Bachelor
Total Marks: 100
Semester: Spring, 2013

ASSIGNMENT No. 1
Note: All questions carry equal marks.

Q.1 Describe the design goals of various network topologies.
Q.2 What are the advantages of queuing techniques? Elaborate.
Q.3 Differentiate between CSMA/CD and CSMA/CA.
Q.4 Define OSI model. How the different layer of OSI model work?
Q.5 How TCP/IP protocol organizes various communication tasks?

ASSIGNMENT No. 2
Total Marks: 100
Note: All questions carry equal marks.

Q.1 Write a detail explanation of satellite network.
Q.2 What are the attribute of a LAN. Also describe the characteristics of ISDN network?
Q.3 Discuss the various techniques of flow control in communication network.
Q.4 What are the advantages of digital system and carrier system?
Q.5 What are the techniques for analog to digital transmission?
3418 Networking Design Credit Hours: 3(3 + 0)

Recommended Book:
Computer Networks “Protocols, Standard, and Interfaces By UYLESS BLACK 2nd Edition

Course Outlines:
Unit No.1 Introduction to Computer Network
The Use of Networks, Advantages of Networks, Communications Networks, Point to Point and Multidrop Circuits, Networks Topologies and Design Goals, Connecting the Analog and Digital Worlds, The Modem Synchronizing Networks Components, Synchronization Codes, Asynchronous and Synchronous Transmission, The Communication Port, Additional Networks Components

Unit No.2 Communication between Computers and Terminals

Unit No.3 Layered Protocols, Networks And OSI Model

Unit No.4 TCP/IP
Introduction to Internet, Protocols

Unit No.5 Satellite Networks

Unit No.6 Networks
Primary Attributes of a LAN, Broadband and Base band LANs, LAN Standards, Connection Options with LAN, LAN Topologies and Protocols, Token Ring, Token Bus, Isdn

Unit No.7 Switching and Routing In Networks & X.25 Network

Unit No.8 Digital Networks & Personal Computer Networks
Advantages of Digital Systems, Signal Conversion, Digital Carrier Systems, Analog to Digital Techniques, Waveform Analysis, Communication Characteristics, Error Handling, Pc as a Server, Pc and Mainframe Computer, Pc and An, Pc Networks and OSI Model

Unit No.9 Internet Services