

IV B.Tech I Semester Supplementary Examinations, November 2005
COMPUTER NETWORKS

(Common to Electronics & Communication Engineering, Electronics & Instrumentation Engineering, Bio-Medical Engineering, Computer Science & Systems Engineering and Electronics & Telematics)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Explain the relations between the layers at the interface. [5]
(b) State five applications of the application layer of TCP/IP. [5]
(c) Discuss the layering architecture of Novell network. [6]
2. (a) Compare virtual circuits with circuit switching. [6]
(b) How is transmission done in ATM networks. [10]
3. (a) Explain in detail the operation of slotted Aloha? [8]
(b) A Ten thousand air line reservation station is competing for the line of single slotted Aloha channel. The slot is 125μ sec, What is approximate total channel load. [8]
4. (a) Explain point to point protocol with frame format. Explain how it provides the facility through link control protocol and network protocol. [10]
(b) What is the remainder obtained by dividing $x^7 + x^5 + 1$ by the generator polynomial $x^3 + 1$? [6]
5. (a) Explain distance vector routing algorithm with an example. [10]
(b) Explain briefly how addressing is done in ATM networks? [6]
6. (a) Does the TC sublayer distinguish between different VCs at either the transmitter or receiver? [8]
(b) Does the TC sublayer at the transmitter fill in any of the fields in the ATM header? Which ones? [8]
7. (a) Describe the basic structure of ATM Adaptation layer. [8]
(b) Which protocol is used for transmitting uncompressed audio and video? Discuss its important features. [8]
8. Write short notes on [6+5+5]
 - (a) Internet working
 - (b) E-Mail
 - (c) WWW
