

***B. Tech Degree VII Semester Examination
November 2006***

CS/EC/IT 701 COMPUTER NETWORKS
(2002 Admissions Onwards)

Time : 3 Hours

Maximum Marks : 100

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|-----------|-----|---|------|
| I. | (a) | Describe the different LAN topologies. | (10) |
| | (b) | What is X.25 network standard? Discuss briefly. | (10) |
| OR | | | |
| II. | (a) | What is TCP/IP reference model? Explain about functions of each layer. | (10) |
| | (b) | Give the ATM architecture and discuss the functions of each layer. | (10) |
| OR | | | |
| III. | (a) | How the channel partition multiple access systems are classified? Explain. | (10) |
| | (b) | What is Ethernet protocol? Briefly describe the Ethernet standard. | (10) |
| OR | | | |
| IV. | (a) | Explain the working of a sliding window protocol. | (10) |
| | (b) | How a Carrier Sense Multiple Access (CSMA) systems are classified? Discuss about each type. | (10) |
| OR | | | |
| V. | (a) | Briefly describe about the various types of Internet Control protocols. | (15) |
| | (b) | Compare datagram and virtual circuit. | (5) |
| OR | | | |
| VI. | (a) | How the IP addresses has been classified? Explain. | (10) |
| | (b) | What is congestion? Describe different congestion control algorithms. | (10) |
| OR | | | |
| VII. | (a) | Give the functions of transport layer. | (5) |
| | (b) | What are the main issues of a connection oriented transport protocol? Explain. | (15) |
| OR | | | |
| VIII. | (a) | Briefly discuss about TCP congestion control methods. | (10) |
| | (b) | Describe different types of AAL protocols. | (10) |
| OR | | | |
| IX. | (a) | How does a Simple Mail Transfer Protocol (SMTP) functions? Explain with one example. | (10) |
| | (b) | What is public Key Cryptography? Explain. | (10) |
| OR | | | |
| X. | (a) | What is URL? Give its features. | (10) |
| | (b) | Write a short note on Digital Signature. | (10) |