BTS(C) – VII– (S) - 09 – 034 – A

B. Tech Degree VII Semester (Supplementary) Examination, July 2009

IT/CS/EC 701 COMPUTER NETWORKS
(2002 Scheme)

Time: 3 Hours   Maximum Marks: 100

I.	a.	Describe the LAN topologies.	(10)
	b.	What is X.25 network standard? Describe.	(10)

OR

II.	a.	Briefly explain the ISO-OSI reference model with function of each layers.	(10)
	b.	With the help of neat diagram, explain TCP/IP protocol stack.	(10)

III.	a.	What is hamming distance? Explain hamming code for error correction with a suitable example.	(10)
	b.	Explain CSMA/CD protocol for multiple access channel.	(10)

OR

IV.	a.	Explain the working of a sliding window protocol.	(12)
	b.	What is the need of ARP protocol? Explain RARP protocol with suitable example.	(8)

V.	a.	Compare Datagram and Virtual circuit.	(6)
	b.	Explain distant vector routing with suitable example.	(8)
	c.	Briefly explain various internet control protocols.	(6)

OR

VI.	a.	Draw IPV4 datagram header and explain each header.	(8)
	b.	Explain OSPF in detail.	(6)
	c.	How fragmentation can be achieved in IP packet? Explain.	(6)

VII.	a.	What is UDP? Explain its segment structure.	(10)
	b.	Explain different services provided by transport layer.	(10)

OR

VIII.	a.	Draw and explain TCP segment structure.	(10)
	b.	What are the main issues of a connection oriented transport protocol? Explain.	(10)

IX.	a.	What is the need of Domain Name System? Explain the domain name structure followed by WWW.	(10)
	b.	Explain firewalls.	(10)

OR

X.	a.	How does a Simple Mail Transfer Protocol(SMTP) functions? Explain with example.	(10)
	b.	What is Digital Signature? How it has been implemented?	(10)

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