Reg. No. :

Question Paper Code : 51357

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2014.

Sixth Semester

Electrical and Electronics Engineering

CS 2363/ CS 65/10144 CS 503 — COMPUTER NETWORKS

(Regulation 2008)

(Common to PTCS 2363 – Computer Networks for B.E. (Part-Time) Fifth Semester Electrical and Electronics Engineering – Regulation 2009)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. List the advantages of FDDI?
- 2. What is a bridge?
- 3. What is the need for ARP?
- 4. How CIDR reduces the number of entries in the routing table?
- 5. Define congestion.
- 6. Which protocol is faster either UDP or TCP? Why?
- 7. What is the principle of symmetric key encryption?
- 8. What is firewall? Specify the use of packet filtering firewall?
- 9. Differentiate active and passive FTP.
- 10. What is DNS? Specify its role.

PART B — $(5 \times 16 = 80 \text{ marks})$

11. (a) Discuss any two error detection methods in detail with an example.

(16)

(6)

\mathbf{Or}

(b) (i) Explain the FDDI network architecture and its operation in detail. (10)

(ii) Illustrate the features of Ethernet transmission.

12. (a) Explain in detail about the ARP and RARP mechanisms with suitable example. (16)

\mathbf{Or}

	(b)	(i)	Discuss the role of DHCP in Client/ Server behavior.	(8)
		(ii)	Explain the features of CIDR and list its advantages a disadvantages.	nd (8)
13.	(a)	Disc	uss the TCP and its hand-shake mechanism with neat diagram. (16)
			Or	
	(b)	(i)	Explain how congestion is avoided in TCP/IP transmission	on. (8)
		(ii)	Discuss the features and applications of UDP.	(8)
14.	(a)	(i)	List the difference between JPEG, MPEG and compare the mer and drawbacks.	rits (8)
		· (ii)	Explain any two types of key distribution in detail.	(8)
			Or	
	(b)	(i)	Discuss IP Security in detail.	(8)
		(ii)	Explain the circuit level gateway filtering and its advantage or filtering methods.	ver (8)
15.	(a)	(i)	Explain the functionalities of domain name system with suita example.	ble (8)
		(ii)	Describe the architecture of SNMP and its working principle.	(8)
			Or	
	(b)	Expl	lain the following with suitable example :	
		(i) ·	Overlay networks	(8)

(ii) HTTP request and response with it headers. (8)

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