Exam.Code:0918 Sub. Code: 6792

1059

B.E. (Computer Science and Engineering) Sixth Semester

CS-601: Computer Networks and Security

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Part.

x-x-x

	i) A network on the internet has subnet mask of 255.255.240.0. What is maximum number of hosts it	(1
	can handle?. ii) Briefly give the difference between open loop and closed loop congestion control techniques. iii) An IP datagram using the strict source routing option has to be fragmented. Do you think the option is	(1
	copied into each fragment, or is it sufficient to just put it in the first fragment? Briefly give your answer. iv) What is significance of Fermat's little theorem?	(1
	v) What is SNMP?	(1)
	vi) Define Digital Signatures. vii) Give the name of any protocol which uses link state routing algorithm.	(1
	viii) Briefly explain how IP security is maintained. ix) Suppose that instead of using 16 bits for the network part of class B address originally, 20 bits had been used. How many class B networks would there have been?	(1
	x) What is problem associated with Distance Vector Routing protocol?	(1)
	PART-A	
П	a) Explain the differences between IPv4 and IPv6 addressing along with their frame formats	(5)
	b) expendicts the application of the second	
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	Consider the subnet given in above figure. Distance vector routing is used, and the following vectors have just come	
	in to router C: from B (5,0,8,12,6,2); from D (16, 12,6,0,9,10); and from E (7,6,3,9,0,4). The measured delays to B, D, and E are 6, 3, and 5 respectively. What is C's new routing table? Give both the outgoing line to use and the expected delay.	
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