

[Time:2.30 Hrs]		[Marks:75]
Please check whether you have got the right question paper.		
N.B:	1. All question are compulsory. 2. Figures to the right indicate full marks. 3. Students answering in the regional language should refer in case of doubt to the main text of the paper in English.	

Q.1	Attempt <u>any three</u> of the following: a. What is data communication? Explain its characteristics. b. Define the following terms: i. Peak amplitude ii. Period iii. Frequency iv. Phase v. Wavelength c. Explain transmission modes in brief. d. Explain TCP/IP suite in brief. e. What is transmission impairment? Explain its causes. f. Explain Frequency Shift Keying.	15
Q.2	Attempt <u>any three</u> of the following: a. Explain Time Division Multiplexing. b. Write a short note on FHSS. c. Explain three classes of guided media. d. Explain phases of circuit switched networks. e. Explain process of CRC. f. What is hamming distance? What is minimum hamming distance?	15
Q.3	Attempt <u>any three</u> of the following: a. Explain flow control and error control. b. Explain point-to-point protocol. c. Explain the three controlled access methods. d. Explain frame format of IEEE 802.3. e. Explain features of cellular system. f. Explain features of VLAN.	15
Q.4	Attempt <u>any three</u> of the following: a. Explain any five services of network layer. b. Explain the ways in which performance of network can be improved. c. Write a short note on fragmentation. d. Explain various error reporting messages. e. Explain distance vector routing. f. Explain types of OSPF messages.	15

Q.5	Attempt <u>any three</u> of the following: a. Explain the working of simple protocol. b. Explain services of UDP. c. Explain TCP header format. d. Explain email architecture. e. Explain various components of SSH. f. Explain working of DNS.	15
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