SE| I T| Sem Ⅳ| CBCS

[Time: Three Hours]

1 3 MAY 2019

[Marks:80]

Note:

1) Q.1 is compulsory
2) Answer any 3 from Q2-Q6

Q.1. Answer the following (5M each)

a) Consider five source symbols of a discrete memory less source their probabilities as shown. Follow the Huffman's algorithm to find the codewords for each message:

m1	m2	m3	m4	m5
0.4	0.2	0.2	0.1	0.1

b) Compare Bus and Star topology
c) Compare Message Switching and Circuit Switching
d) Compare LAN,MAN,WAN

Q.2. a) Draw and explain the OSI Reference Model.   (10)

Q.2. b) Generate the CRC code for a dataword 110010101.The divisor 10101.Check whether there are errors in the received codeword.   (10)

Q.3. a) Explain ALOHA and Slotted ALOHA.   (10)

Q.3. b) Compare wired and wireless media.   (10)

Q.4. a) Explain the IPV4 header format.   (10)

Q.4. b) Compare TCP and UDP.   (10)

Q.5. a) What is routing? Explain DVR with an example.   (10)

Q.5. b) Explain sliding window protocol.   (10)

Q.6. Write short notes on any four: (5M each)

a) Speech Compression
b) DNS
c) Congestion Control
d) TCP Timers
e) WWW

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