B.E. / B.Tech. DEGREE EXAMINATION, AUGUST 2021

Fourth Semester

Computer Science and Engineering

15UCS404- COMPUTER COMMUNICATION AND NETWORKS

(Regulation 2015)

Duration: 1:45 hrs   Maximum: 50 Marks

PART A

(Answer any Ten Questions 10 x 2 Mark = 20 Marks)

1.	Summarize TCP/IP Protocol Suite.	CO1- U
2.	A bit string, 0111101111101111110, needs to be transmitted at the data link layer. What is the string actually transmitted after bit stuffing?	CO2- App
3.	Differentiate router and bridge.	CO3- U
4.	State the purpose of ICMP redirect message.	CO4- R
5.	The maximum payload of a TCP segment is 65,495 bytes. Why was such a strange number chosen?	CO5- U
6.	Explain why collision is an issue in a random access protocol but not in controlled Access or channelizing protocols.	CO2- U
7.	Define handoff.	CO3- U
8.	Define roaming.	CO3- U
9.	Draw the SONET layers in comparison with OSI layers.	CO3- U
10.	Draw the IPv4 datagram format.	CO4- U
11.	Define Routing? Write the keys for understanding the link state routing?	CO4- U
12.	Write the keys for understanding the distance vector routing?	CO4- U
13.	What are the advantages of allowing persistent TCP connection in HTTP?	CO5- U
14.	Give the format of HTTP request message?	CO5- U
15.	Differentiate between delay and jitter.	CO5- U

PART – B

(Answer any Three Questions 3 X 10 = 30 Marks)

16.	Draw the OSI architecture and summarize the functionalities of each layer.	CO1 - APP	(10)
17.	Describe the hamming code method for error correction of transmitted ts bits with suitable numerical example.	CO2 - APP	(10)
18.	Explain the three generations of Cellular Telephony.	CO3 - U	(10)
19.	Explain about IPV6? Compare IPV5 and IPv6	CO4 - APP	(10)
20.	Explain the various fields of TCP header with the help of a neat diagram.	CO3 - App	(10)