Total Pages-03

2021

BCA

[HONOURS]

(CBCS)

(B.Sc. Third Semester End Examination-2021)

PAPER-C7T

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks Candidates are required to give their answers in their own words as far as practicable Illustrate the answers wherever necessary

Group-A

Answer any five questions of the following: $5x^2 = 10$

- 1. Explain different transmission modes available and also mention the applications of different mode.
- 2. Compare between OSI and TCP/IP model
- 3. Explain the transmission and propagation time.
- 4. What is framing? Explain different types of framing?
- 5. Why the transmission speed of optical fiber cable(OFC) is higher than other medium?
- 6. What is the advantage of IPV6 over IPV4?

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- 7. Explain briefly about pulse code modulation (PCM) technique.
- 8. What do you mean by Transmission impairment? Explain different types of Transmission impairment.

<u>Group-B</u>

Answer any four questions of the following: 5x4 = 20

- Explain unicast, broadcast network and point to point network.
- 3. Compare between CSMA and CSMA/CD. Explain the ALOHA technique 5
- 4. Compare between networking devices such as HUB, Gateway and router? What is routing table?
- 5. Explain stop and wait ARQ protocol and why it is call ARQ 2+2
- Write down the roles of bottom most three layers of OSI model? How multiplexing is useful in computer network.
 3+2
- 7. What is the default subnetmask of the 198.10.10.0/27? How many subnets are in this network? How many host are there in this each subnet?

<u>Group –C</u>

Answer any one questions of the following: 10x1 = 10

8. Compare between TCP and UDP protocol? Why UDP is called connectionless protocol? Explain the three way

handshaking in TCP? Explain the basic approach of error detection technique. 2+2+3+3

9. Draw the signal pulse for 1010110 using Manchester and differential Manchester encoding and explain briefly? What are the different task performed by transport layer? What do you mean by Ethernet? What is the IEEE code for Ethernet? Explain the frame structure of Ethernet? 3+2+1+1+3
