Vivekananda College of Engineering & Technology, Puttur

[A Unit of Vivekananda Vidyavardhaka Sangha Puttur ®]
Affiliated to VTU, Belagavi & Approved by AICTE New Delhi

CRM08 Rev 1.10 CSE 23/06/2021

CONTINUOUS INTERNAL EVALUATION- 2

| Dept:CSE | Sem / Div: 4/A &B | Sub:Data Communication | S Code:18CS46 | |
|---|-------------------|------------------------|---------------|--|
| Date:26/05/2021 | Time: 3.00-4.30 | Max Marks:50 | Elective:N | |
| | | | | |
| Note: Answer any 2 full questions, choosing one full question from each part. | | | | |

| Q N | Questions | Marks | RBT | COs | | |
|--------|--|-------|-----|-----|--|--|
| PART A | | | | | | |
| 1 a | What is Switching? Expalin Circuit switched network. | 10 | L2 | CO2 | | |
| b | Explain ASK & FSK in detail. | 10 | L2 | CO2 | | |
| c | Explain Synchronous transmission with a neat diagram | 5 | L3 | CO2 | | |
| | OR | | | | | |
| 2 a | What is packet switching? Explain Virtual circuit networks with a neat diagram. | 10 | L2 | CO2 | | |
| b | Explain with a diagram, Cyclic Redundancy check. | 10 | L2 | CO2 | | |
| С | Explain Asynchronous transmission with a neat diagram | 5 | L3 | CO2 | | |
| PARTB | | | | | | |
| 3 a | What is multiplexing? Define Synchronous TDM with Data Rate Management strategies. | 10 | L3 | CO2 | | |
| | b What is Spread Spectrum? Explain Direct Sequence spread spectrum with an example? | | L2 | CO2 | | |
| С | Four 1-kbps connections are multiplexed together. A unit is 1 bit. Find (a) the duration of 1 bit before multiplexing, (b) the transmission rate of the link, (c) the duration of a time slot (d) the duration of a frame. | 5 | L3 | CO2 | | |
| OR | | | | | | |
| 4 a | Explain Multiplexing and Demultiplexing process in Frequency Division multiplexing | 10 | L3 | CO2 | | |

c Define cyclic code. Find the codeword c(x), using CRC given data word

bExplain FHSS in detail

101001111 and generator 10111

10

5

L2

L3

CO₂

CO₂