

Seat No. : _____

MT-129

March-2019

TY Integrated M.Sc. (CA & IT), Sem.-VI

Data Communication & Networking

Time : 2:30 Hours]

[Max. Marks : 70

1. (A) Explain the following : (Any seven) 14
- (1) Latency
 - (2) Data Flow mode
 - (3) Two dimension parity check
 - (4) Repeater
 - (5) Bandwidth
 - (6) Piggybacking
 - (7) Classless IP address
 - (8) Socket
2. (A) Answer the following questions : (Any seven) 14
- (1) What is Point to point and Multipoint connection ?
 - (2) What is Flow Control ?
 - (3) What is Frequency and Period ?
 - (4) Do Byte stuffing for data "DCN@@@@##COMMUNICATION @@@#@#" where @ is flag and # is esc.
 - (5) Do Bit stuffing for data "0111 1111 0011 1111 1100 0111 1110 "where 0111 1110 is flag.
 - (6) Write default subnet mask of network class A,B and C.
 - (7) A digital signal has 8 levels. How many bit send per level ?
 - (8) Find network id and host id of following classful IP address
(i) 110.10..15.20 (ii) 180.25.10.20
3. (A) Explain the following in brief : (Any two) 12
- (1) Explain Go Back N sliding window protocol with example
 - (2) What is Error Detection Method ? Calculate CRC (7,4) where data word is 1001 and divisor is 1011.
 - (3) What is Checksum ? Calculate checksum for data 4,3,6,2,5,7,8.
- (B) Explain Block coding 2

4. (A) Answer the following questions : (Any **two**) **12**
- (1) What is Dynamic Routing ? Explain Link State Routing algorithm.
 - (2) What switching network ? Explain Virtual Circuit Switching Network.
 - (3) What is Transparent Bridge ? Explain self learning process of Transparent bridge with example.
- (B) Explain Sinewave **2**
5. (A) Answer the following questions : (Any **two**) **12**
- (1) What is Transmission Impairment ? Explain different type of Transmission Impairment in detail.
 - (2) Explain Circuit Switching Network.
 - (3) Explain Distance Vector routing algorithm.
- (B) Explain Port address. **2**
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