H

Roll No.

TCS-703

B. TECH. (SEVENTH SEMESTER) END SEMESTER EXAMINATION, Dec., 2022

COMPUTER NETWORK-II

Time: Three Hours

Maximum Marks: 100

Note: (i) All questions are compulsory.

- (ii) Answer any two sub-questions among (a), (b) and (c) in each main question.
- (iii) Total marks in each main question are twenty.
- (iv) Each sub-question carries 10 marks.
- 1. (a) What is routing? Explain Link state routing algorithm. (CO1)
 - (b) Differentiate between global and decentralized routing with example. (CO1)

- (c) Explain the terms unicast, broadcast, multicast and anycast routing by giving suitable example. (CO1)
- 2. (a) Describe data link layer services. (CO2)
 - (b) Differentiate between error detection and error correction with example. (CO2)
 - (c) A bit stream 1101011011 is transmitted using the standard CRC method. The generator polynomial is $x^4 + x + 1$. What is the actual bit string transmitted? (CO2)
- 3. (a) Discuss any *two* protocols for Real Time Interactive Applications. (CO3)
 - (b) What is multimedia networking? Explain with suitable example. (CO3)
 - (c) What is RTSP? Explain its significance in multimedia networking. (CO3)
- 4. (a) What are network management standards? Explain. (CO4)
 - (b) Explain SNMP organization model with neat diagram. (CO4)
 - (c) Briefly explain Network Management functional groupings with neat diagrams.

5. (a) Describe the syntax and purpose of the each of the following: (CO5)

- (i) Socket
- (ii) Bind
- (iii) Accept
- (iv) Listen
- (v) Connect
- (b) Explain with a diagram the steps that normally take place in a remote procedure call. (CO5)
- (c) Discuss the uses of the following TCP Socket options: (CO5)
 - (i) TCP MAXSEG
 - (ii) TCP NODELAY