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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)

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- (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. (CO4)

(3)

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