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)

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

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