P-5028

[6187]-428
T.E. (Insem.) (Computer Engineering)
COMPUTER NETWORKS & SECURITY
(2019 Pattern) (Semester - I) (310244)

Time : 1 Hour]   *[Max. Marks : 30*
Instructions to the candidates:
    1)   *Answer Q.1 or Q.2, Q.3 or Q.4.*
    2)   *Neat diagrams must be drawn whenever necessary.*
    3)   *Figures to the right side indicate full marks.*
    4)   *Assume Suitable data if necessary.*

Q1) a)   Draw and explain OSI Model.   **[6]**

      b)   Explain Direct Sequence Spread Spectrum.   **[5]**

      c)   Explain i) Router ii) Switch.   **[4]**

<div align="center">OR</div>

Q2) a)   Explain TCP/IP Model.   **[6]**

      b)   Draw Manchester and differential Manchester code for the bit sequence: 01001011.   **[5]**

      c)   Explain Ring and Mesh topologies.   **[4]**

Q3) a)   Justify answer using CRC for divisor: 1101 dividend: 100100.   **[6]**

      b)   Explain IEEE 802.15 frame format.   **[5]**

      c)   Give brief about design issues in DLL.   **[4]**

<div align="center">OR</div>

Q4) a)   What is sliding window protocol? How it works?   **[6]**

      b)   Explain CSMA in detail.   **[5]**

      c)   Explain PPP.   **[4]**

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