## 20UCACT4007

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS) (Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai - 600 044. BCA. - END SEMESTER EXAMINATIONS APRIL - 2024 SEMESTER - VI 20UCACT4007 - Data Communication and Networking

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

## Section B

Answer any **SIX** questions  $(6 \times 5 = 30 \text{ Marks})$ 

- 1. Illustrate the various components of data communications.
- 2. Show the difference between point-to-point and multipoint connection in network.
- 3. Distinguish between the parallel transmission and serial transmission.
- 4. Explain the functions of twisted-pair cable with diagram.
- 5. Describe the measure the performance of a coaxial cable.
- 6. Predict the basic concept of digital signature.
- 7. Relate the security requirements of public-key signatures.
- 8. Determine the initialization of tables in distance vector routing.

## Section C

Answer any **THREE** questions  $(3 \times 10 = 30 \text{ Marks})$ 

- 9. Rephrase the different categories of networks.
- 10. Compute the various layers in the OSI model with diagram.
- 11. Examine the types of connectors for fiber-optic cables.
- 12. Compare and construct frequency-division multiplexing and wavelength-division multiplexing.
- 13. Evaluate the concept and functions of link state routing.

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