



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc.DEGREE EXAMINATION – COMPUTER SCIENCE

FOURTHSEMESTER – APRIL 2018

16UCS4ES01- DATA COMMUNICATION AND NETWORKS

Date: 23-04-2018
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

Part –A (10x 2 = 20)

Answer all the questions:

1. Differentiate LAN and WAN.
1. Define the term protocol.
2. What is meant by Digital Signal?
3. List out the responsibilities of Physical Layer.
4. Define the term : Wavelength
5. Differentiate Line Coding with Block Coding.
6. List out the different classes of Transmission media.
7. What is the purpose of Modem?
8. Define the term : Repeaters
9. What is the purpose of File Transfer Protocol?

Part – B (5 x 8 = 40)

Answer all the questions:

10. a) Write about the components of Data Communication system with a neat diagram.
(or)
b) What are the key elements of protocol? Explain.
11. a) Write in brief about simple analog signals.
(or)
b) List the difference between periodic and aperiodic signals.
12. a) Explain Analog to Analog modulation in detail.
(or)
b) Write short notes on Transmission Modes.
13. a) Explain Error Detection method in Data Communication.
(or)
b) Compare Guided Transmission Media with Unguided Transmission Media.
14. a) Explain about the Networking and Internetworking Devices.
(or)
b) Write short notes on Domain Name System (DNS).

Part – C (2 x 20 = 40)

Answer any two questions:

15. a) Explain in detail about Topology in Data Communication with neat diagram.
b) Explain the Structure of ISO-OSI model with its functions.
16. a) Explain Digital – to – Digital modulation in detail.
b) Explain Multiplexers in detail.
18. a) Explain TCP / IP protocol with neat diagram.
b) Explain the Distance Vector Routing algorithm with an example.

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