



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

FIRST SEMESTER – APRIL 2019

17/18PCS1MC05– ADVANCED COMPUTER NETWORKS

Date: 08-04-2019
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

Part – A

Answer ALL the questions

10 x 2 = 20 marks

1. How Broadcasting differs from Multicasting?
2. Notify any two advantages of standardization.
3. Draw the block diagram of twisted pair.
4. What is term frequency?
5. List any four popular framing techniques.
6. Convert 0101010 into the Even Parity bit.
7. Differentiate between congestion and flooding.
8. What is buffering?
9. State any two advantages of Self Organizing Networks.
10. What is the use of IEEE 802.11?

Part – B

Answer ALL the questions

5x 8 = 40 marks

11. a) Explain how the hardware in Local Area Networks differs from Wide Area Networks (Or)
b) Describe various layers in TCP/IP model and explain their characteristics.
12. a) Discuss about the coaxial cable transmission (Or)
b) Briefly write about Radio transmission and Light Wave transmission.
13. a) Explain any two routing algorithms with an example each (Or)
b) Describe about Flow Control mechanisms in the modern network.
14. a) Illustrate addressing problems in the network (Or)
b) Explain the elements of Transport Protocol.
15. a) Discuss the technologies behind Wireless Local Area Networks (Or)
b) Explain HiperLAN2 protocol stack and its characteristics.

Part – C

Answer ANY TWO questions

2 x 20 = 40 marks

16. a) With a block diagram, explain the features in architecture of Internetworking.

b) Compare the Transmission Media of Fiber Optics and Satellite Communications.

17. a) Illustrate the use of error detection code and error correction code with an example each.

b) Explain how TCP is more reliable in delivering packets.

18. a) Describe about Scatternet architecture and explain how it differs from Picconet.

b) Compare the header design, transmission model and the transmission management of the User Datagram Protocol (UDP) and the Transmission Control Protocol (TCP).
