LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – **COMPUTER SCIENCE**

THIRD SEMESTER – **APRIL 2016**

CS 3822 - WIRELESS AND COMMUNICATION NETWORKS

Date: 28-04-2016   Dept. No.   Max. : 100 Marks
Time: 09:00-12:00

PART-A

Answer All the Questions.   10 X 2=20

1. Mention the types of cells according to its size.
2. Define ping pong effect.
3. Classify the TDMA frame hierarchy in GSM.
4. Define cell breathing in CDMA network planning.
5. Classify the mobile data networks.
6. What are the new elements added to the GSM architecture to support GPRS?
7. What is extended service set (ESS) in IEEE802.11?
8. List out the types of HIPERLAN.
9. What is firewall?
10. Write the purpose of DHCP.

PART- B

Answer All the Questions   5 X 8=40

11 (a) Compare AdHoc and infrastructure Network Topologies.

OR

(b) Explain power control and power savings mechanism used in cellular networks.

12 (a) What are logical channels and explain its categories in GSM technology.

OR

(b) Discuss the purpose of pilot channels in CDMD with neat diagram.

13 (a) Explain the services offered by CDPD and the interfaces used in CDPD.

OR

(b) What is GPRS? Explain its architecture with neat diagram.

14 a) Explain about MAC management sub layer of IEEE 802.11

OR

b) Explain about the elements of core protocol in Bluetooth.

15 a) Discuss the entities used in mobile IP for packet delivery.

OR

b) Elaborate the concept and working of snooping TCP.

PART-C

16 (a) Explain the architectural methods required for capacity expansion in cellular technology.

   (b) Discuss about the forward channel in CDMD with neat diagram.

17 (a) Explain the Mobile application protocol with neat diagram.

   (b) Explain about physical layer of IEEE 802.11.

18(a) Compare the different approaches used for mobile TCP.

   (b) Write the advantages and disadvantages of the following (i) Infrared (ii) radio transmission

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