LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – **APRIL 2014**

CS 3822 - WIRELESS AND COMMUNICATION NETWORKS

Date : 08/04/2014 Dept. No. Max. : 100 Marks
Time : 01:00-04:00

PART-A

Answer All the Questions. 10 X 2=20

1. Write the types of interference in cellular architecture.
2. Define ping pong effect
3. Mention the types of bursts for traffic and control signaling in GSM.
4. What is CDMA?
5. List out types of different mobile data networks.
6. What are the new elements added to the GSM architecture to support GPRS?
7. Define Piconet.
8. Write Bluetooth transceivers class.
9. Define Encapsulation.
10. Write the mechanism used in Indirect TCP.

PART- B

Answer All the Questions 5 X 8=40

11(a) Compare Adhoc and infrastructure Network Topologies.

OR

(b) Write and Explain Handoff decision time algorithms.

12 (a) Explain TDMA frame hierarchy with neat diagram.

OR

(b) Explain the reference architecture of GSM with neat diagram.

13 (a) Elaborate the different categories of mobile data networks with example for each.

OR

(b) What is WAP? Explain how internet based application are being adapted to the cellular System using WAP

14 a) Explain about physical layer of IEEE 802.

OR

b) Draw the architecture structure of Bluetooth.Explain the component.

15 (a) Discuss the entities used in mobile IP

OR

(b) Explain the principle and working of snooping TCP

PART-C

Answer any **TWO** questions 2 X20=40

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

b) Explain physical layer of protocol stack of GSM.

17 a)Explain GPRS architecture reference model with neat diagram.

b) Explain about the elements of core protocol in Blue tooth.

18 a) Compare the different approaches for mobile TCP.

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

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