LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – **NOVEMBER 2014**

CS 3822 - WIRELESS AND COMMUNICATION NETWORKS

Date : 05/11/2014 Dept. No. Max. : 100 Marks
Time : 09:00-12:00

PART-A

Answer All the Questions: **10 X 2=20**

1. Mention the purpose of micro cell and mega cell.
2. What is Breathing effect?
3. Mention the types of bursts for traffic and control signaling in GSM.
4. What are the new elements added to the GSM architecture to support GPRS?
5. List out the types of different mobile data networks.
6. What is CDPD?
7. Define Pico net.
8. What isRTS/CTS?
9. Define Encapsulation.
10. Write the mechanism used in Indirect TCP.

PART- B

Answer All the Questions: **5 X 8=40**

11.(a) Discussarchitectural methods used for capacity expansion in cellulartechnology

OR

(b) Discuss about the process that are required for handoff management in a generic wireless networks.

12. (a) What is GSM? Explain the services offered by GSM.

OR

(b) Write the application of CDMA and Compare W-CDMA and CDMA 2000 proposals.

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

OR

(b) Write the purpose of i-mode service and give an example

14. (a) Explain different spread spectrum used in physical layer of IEEE 802.11

OR

(b) Draw and explain the architecture ofBluetooth.

15. (a) Discuss the entities and terminology used in mobile IP.

OR

(b)What is Indirect TCP? Explain itsadvantages and disadvantages.

PART-C

Answer any TWO Questions: **2 X20=40**

16. (a) Write the short note about (i) Cellular topology
(ii) Cellular hierarchy

(b) Explain the forward and reverse link in CDMA.

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

(b) Discuss MAC layer of wireless LAN with a neat diagram.

18. (a) Compare the different approaches used in classical enhancements to TCP.

(b) Explain the services and interfaces of CDPD

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