LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRDSEMESTER – APRIL 2018

CS 3822- WIRELESS AND COMMUNICATION NETWORKS

Date: 03-05-2018   Dept. No.   Max. : 100 Marks
Time: 09:00-12:00

PART-A

Answer All the Questions.   10 X 2=20

1. List out types of interference in cellular concept.

2. What is Ping-Pong effect?

3. Mention the type's services available in GSM.

4. What are the new elements added to the GSM architecture to support GPRS?

5. Classify the mobile data networks.

6. Write any two design goal of CDPD?

7. Define Pico net.

8. What is the difference between an ESS and a BSS in the IEEE802.11

9. Define Encapsulation.

10. What is the advantage of using DHCP in a Network?

PART- B

Answer All the Questions   5 X 8=40

11(a) Write the short note about   (i) Cellular topology
                                      (ii) Cellular hierarchy
                     OR
   (b) Write and Explain Handoff decision time algorithms.
12 (a) Explain different physical packet burst in GSM
                     OR
   (b) Discuss the applications of CDMA and its access technology.

13 (a) Explain the services offered by CDPD and the interfaces used in CDPD.
                     OR
   (b) Write the purpose of i-mode service and give an example for imode.
14   a) Explain different spread spectrum used in physical layer of IEEE 802.11

                     OR
   b)   Draw and explain the architecture of Bluetooth.
15 (a) Discuss the entities and terminologies used in mobile IP.
                     OR
 (b) Write the short note about (i) Fast retransmits (ii) timeout freezing (iii) selective retransmission

Answer any TWO   2 X20=40

16 a) Discuss architectural methods used for capacity expansion in cellular technology

   b)) Discuss the reference architecture of GSM

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) Write the short about

       (i) IP packet delivery

       (ii) Agent advertisement in Mobile IP.

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