 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION - **COMPUTER SC.**

SECOND SEMESTER – APRIL 2012

# CS 2812 - MOBILE COMPUTING

Date : 19-04-2012 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

PART-A

Answer ALL questions: 10\*2=20

1. What is Frequency division duplex?
2. Mention the logical frame hierarchy in GSM
3. List out different physical layers supported by IEEE 802.11
4. Give the four different network types of BRAN
5. Define Encapsulation.
6. Give an example for triangular routing?
7. What is slow start in TCP?
8. Write any two advantages of fast retransmit
9. List out the features offered by WTP (wireless transaction protocol) to the higher layers
10. Draw the primitive which is used to send a datagram in WDP.

PART-B

Answer ALL questions. 5\*8=40

1. (a) Name the main elements of GSM system architecture and describe their functions

OR

(b) Describe Digital audio broadcasting.

1. (a) Compare two different transmission technology used in WLANs.

OR

(b) Explain the handover scenario of HiperLAN2 in detail.

13. (a) Discuss the methods of router discovery in Mobile IP.

OR

(b)Describe Hierarchical mobile IPV6 with diagram.

14. (a) Compare snooping TCP with Mobile TCP with example network scenarios.

OR

(b) Explain the following

(i) Congestion control

(ii) Congestion window

(iii) Congestion threshold

15. (a) Explain in detail about the architecture of WAP (wireless application protocol)

OR

(b) What is Wireless session protocol/browsing? Discuss its session establishment, suspension and resume.

PART-C

Answer any TWO: 2\*20=40

16. (a) Explain the countermeasures for interference in SDMA,TDMA,FDMA and CDMA

systems.

(b)What characteristic do the different orbits have? What are their pros and cons?

17. (a)Write and explain mandatory basic access mechanism for IEEE 802.11.

(b) Explain how tunnelling works in mobile IP using IP-in-IP, minimal, and generic routing

encapsulation. Discuss the advantage and disadvantages of these three methods.

18. (a) How does I-TCP isolate problems on wireless link? What are the main drawbacks of this solution?

(b) Distinguish the service offered by wireless transaction protocol class0,class1 and class2.

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