



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS

FIFTH SEMESTER – APRIL 2016

CA 5407 - CELLULAR AND MOBILE COMPUTING

Date: 25-04-2016
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

PART-A

Answer All the Questions.

10 X 2=20

1. Define cell.
2. What are the different types of signals?
3. Write the purpose of Beacons.
4. What is scatternet?
5. Define Encapsulation
6. Write the mechanism used in selective retransmission.
7. Give an example for i-mode network.
8. Mention the purpose of EDGE?
9. Define pervasive computing
10. What is SOAP?

PART-B

Answer All the Questions

5 X 8=40

11. (a) Discuss the various concepts of cellular system.

OR

- (b) Explain the different topology used in wired and wireless networks.

12. (a) Discuss the advantages and disadvantages of Infra red waves.

OR

- (b) Explain the components of MAC layer in IEEE 802.11.

13. (a) Explain the messages used for optimization and their purpose in mobile IP.

OR

- (b) Compare IPv4 and IPv6.

14. (a) Explain the architecture and applications of WAP.

OR

- (b) Discuss GSM reference model and its entities with neat diagram.

15. (a) Discuss about the features of WI-FI & WI-MAX.

OR

- (b) Discuss about the characteristics of pervasive computing.

PART-C

Answer any TWO

2 X20=40

16. (a) Discuss the following spread spectrum in detail.

(i) Direct sequence spread spectrum

(ii) Frequency hopping spread spectrum.

(b) Discuss the various components and architecture of IEEE 802.11.

17. (a) Discuss the different mechanism used in classical enhancements to TCP.

(b) Explore SMS and MMS architecture with neat diagram.

18. (a) Explain the applications of web services with example.

(b) What is mobile IP? Explain the packet delivery in mobile IP with neat diagram.
