

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS

FIFTH SEMESTER – NOVEMBER 2016

CA 5407 – CELLULAR AND MOBILE COMPUTING

Date: 11-11-2016

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART A

Answer ALL the questions.

(10x2=20)

1. What are the characteristics of Mobile Computing?
2. Define frequency reuse.
3. What are the advantages of Radio frequency waves?
4. What are the different dimensions of security in MAC layer?
5. What are the different address types of Mobile IPv6?
6. Define Binding Cache and Binding Update.
7. Define HLR.
8. What are the different GPRS classes of GPRS devices?
9. Mention a few applications of pervasive computing.
10. What are the features of WI-FI Network?

PART B

Answer all the questions

(5x8=40)

11a. Discuss the different types of Mobile Development Framework.

(OR)

11b. Discuss the working of FDMA.

12a. Explain how Synchronization and Roaming are achieved in WLANS.

(OR)

12b. Discuss about the architecture and services of UMTS.

13a. Discuss about Mobile IP tunnelling in detail.

(OR)

13b. Compare and contrast Indirect TCP, Snooping TCP, Mobile TCP, Selective Retransmission and Transaction oriented TCP.

14a. Discuss the WAP architecture in detail.

(OR)

14b. Discuss about MMS in detail.

15a. Write in detail about the 3 converging areas of ICT.

(OR)

15b. Write in detail about WIMAX.

PART C

Answer any TWO questions

(2x20=40)

16. a. Explain in detail about Cellular System.

b. Discuss the evolution of mobile devices from 1G to 3G.

17. a. Write in detail about Mobile IP operation.

b. Explain the GPRS protocol suite and its interfaces.

18. a. Write in detail about SOAP, UDDI, WSDL and EDGE.

b. Explain the working of CDMA with an example.
