

Question Paper Code : 11481

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2012.

Seventh Semester

Information Technology

IT 2402/IT 72 — MOBILE COMMUNICATION

(Regulation 2008)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Prove that Barker code has good auto correlation.
2. Calculate the channel capacity C , given a bandwidth B as 3100 Hz and number of discrete signals M as 8.
3. What are the three low power states of a Bluetooth state?
4. What is Wireless Local Loop?
5. What are the advantages of GPRS?
6. What are the types of handover in GSM?
7. Differentiate types of Care of Address.
8. What is selective retransmission?
9. What is SyncML?
10. List features of WML.

1. (a) Explain clearly the various schemes for Medium Access Control with Time Division Multiple Access. (16)
- Or
- (b) (i) Compare and Contrast SDMA, FDMA, TDMA and CDMA. (10)
 (ii) Briefly discuss about cellular systems. (6)
2. (a) Briefly explain about the system and protocol architecture of 802.11 standard with MAC layer and its management. (16)
- Or
- (b) Briefly discuss about system and protocol structure of 802.16 standard. (16)
3. (a) Explain the mobile services, system architecture, localization and calling of GSM in detail. (16)
- Or
- (b) (i) Discuss in detail about GPRS architecture and Data Services. (10)
 (ii) Explain security services of GSM system. (6)
4. (a) (i) What is Mobile IP? Explain agent discovery, registration and encapsulation. (12)
 (ii) Write brief note on Fast Retransmit / Fast Recovery. (4)
- Or
- (b) Discuss in detail Indirect and Snooping TCP and differentiate them. (16)
5. (a) Discuss in detail the WAP architecture and Protocol. (16)
- Or
- (b) Write short notes on the following:
- (i) i-mode (8)
 (ii) Wireless markup language. (8)