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Question Paper Code : 60767

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

Seventh Semester

Information Technology

IT 2402/IT 72/10144 IT 702 — MOBILE COMMUNICATION

(Regulations 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What limits the range of wireless LAN?
2. How does near/far effect influence TDMA systems?
3. What are the three low power states of a Bluetooth state?
4. What is Wireless Local Loop?
5. What is handover? Mention the types of hand over in GSM.
6. What are attach and detach procedure in GPRS?
7. What is tunneling?
8. State the advantages of I-TCP.
9. Mention the primary goals of WAP.
10. What is the role of the WTA server?

PART B — (5 × 16 = 80 marks)

11. (a) (i) State and explain four different types of MAC protocols used in mobile communication. (10)
- (ii) Compare and contrast three common multiple access techniques. (6)

Or

- (b) (i) State the different channel assignment techniques. (8)
 - (ii) List and explain types of handoff and their characteristics. (8)
12. (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)
13. (a) (i) What are the different protocols used in GSM? Explain the protocol architecture of GSM. (10)
- (ii) What are the problems associated with Handover in GSM? (6)

Or

- (b) (i) Discuss about GPRS architecture and its operation. (8)
 - (ii) List out the advantage and disadvantage of GPRS system. (8)
14. (a) (i) Explain in detail tunnelling and encapsulation in Mobile IP. (8)
- (ii) Explain the dynamic source routing for Ad hoc networks in detail. (8)

Or

- (b) (i) Describe the working of Snooping TCP in detail. (8)
 - (ii) Write short notes on :
 - (1) Fast Retransmit/Fast Recovery. (4)
 - (2) Transmission/Timeout Freezing. (4)
15. (a) Explain in detail about the components and interfaces of the WAP architecture. (16)

Or

- (b) (i) Discuss the architecture of wireless telephony application in detail. (10)
- (ii) Describe the several standard libraries for WML Script specified by WAP. (6)