Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 73396

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2017.

Seventh Semester

Computer Science and Engineering

CS 2402/CS 72/10144 CS 703 — MOBILE AND PERVASIVE COMPUTING

(Regulations 2008/2010)

(Common to PTCS 2402 –Mobile and Pervasive Computing for B.E. (Part-Time) Sixth Semester – CSE – Regulations 2009)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the ways to improve the efficiency of cellular networks?

2. Why cellular systems require handover procedures?

3. Distinguish between infrastructure and ad hoc networks.

4. What is Bluetooth?

5. When and why Binding update is generated in mobile IP.

6. Why is routing in multihop adhoc networks complicated?

7. Mention the features present in WSP/B in addition to that present in WSP.

8. State the applications of wireless telephony.

9. Define Biometrics.

10. Name some applications of pervasive computing.

PART B — (5 × 16 = 80 marks)

11. (a) Explain with diagrammatic illustration the architecture of Global System for Mobile communication (GSM). (16)

Or

(b) (i) What are the reasons for the delays in a GSM system for packet data traffic? Distinguish between circuit-switched and packet-oriented transmission. (8)

(ii) What are the functions of authentication and encryption in GSM? How is system security maintained? Discuss (8)

12. (a) Write notes on the MAC management of the IEEE 802.11 protocol. (16)

Or

(b) Write notes on the channel access control sublayer. (16)

13. (a) Compare and contrast the proactive and reactive routing in Adhoc networks. Explain with algorithmal example for each. (16)

Or

(b) Write notes on :

(i) DHCP

(ii) Multicast routing. (8+8)

14. (a) (i) What is Wireless Telephony Application? Explain the logical architecture of WTA. (8)

(ii) Explain how Snooping TCP ensures end to end connectivity (8)

Or

(b) Discuss in detail the components and protocols of Wireless Application Protocol. (16)

15. (a) How is server-side security done in pervasive computing? Explain it in detail. (16)

Or

(b) Write down the functionality of WAP in access via WAP. (16)

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