

Reg. No. :

Question Paper Code : 91362

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Seventh Semester

Computer Science and Engineering

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

(Regulation 2008/2010)

(Common to PTCS 2402 /10144 CS 703 — Mobile and Pervasive Computing for  
B.E. (Part-Time) Sixth Semester - Computer Science and Engineering -  
Regulation 2009/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the advantages of GSM?
2. What are the four types of handover available in GSM?
3. What are the design goals of 802.11?
4. What are the three low power states provided by the Bluetooth?
5. List the requirements for mobile IP.
6. Distinguish between proactive and reactive routing.
7. What are the limitations of WAP?
8. Define WSP.
9. What is pervasive computing?
10. What are the limitations of accessing pervasive computing via WAP?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Describe the system architecture of GSM with a neat diagram. (8)  
(ii) Explain how the mobility management is done in GSM. (8)
- Or
- (b) (i) Explain the functions of cellular wireless networks. List its advantages. (8)  
(ii) Explain the architecture of GPRS. (8)
12. (a) (i) Explain the architecture of IEEE802.11 standard. (8)  
(ii) Describe architecture of Bluetooth. (8)
- Or
- (b) (i) Explain the features of HIPERLAN. (8)  
(ii) Describe the architecture of WiMAX. (8)
13. (a) (i) Explain the Dynamic Host Configuration Protocol. (8)  
(ii) Describe the reactive routing protocols. (8)
- Or
- (b) (i) Explain how end to end packet delivery is done in mobile IP. (8)  
(ii) Explain the multicast routing in detail. (8)
14. (a) (i) Describe the architecture of WAP. (8)  
(ii) Discuss the WTP and its classes. (8)
- Or
- (b) (i) Discuss how the optimization is performed in mobile TCP. (8)  
(ii) Describe the WTA architecture. (8)
15. (a) (i) Discuss the applications of pervasive computing. (8)  
(ii) Explain the pervasive web application architecture. (8)
- Or
- (b) (i) Discuss the computational infrastructure required for pervasive computing. (8)  
(ii) Explain the various issues related to device management. (8)