Total No. of Questions :10]          [Total No. of Printed Pages :2

**Roll No** .................................

## IT - 702
### B.E. VII Semester
Examination, December 2013
### Wireless and Mobile Computing

*Time : Three Hours*

*Maximum Marks : 70*

*Note :* 1. Attempt any one question from each unit.

2. All questions carry equal marks.

### Unit - I

1. a) Discuss the similarities and differences between a conventional cellular radio system and a satellite cellular radio system.          7

   b) Explain the cellular design techniques that are needed to improve coverage and capacity in cellular systems.          7

OR

2. a) Discuss the various effects of mobile radio propagation.  7

   b) Compare between SDMA, TDMA, FDMA and CDMA. used in wireless networks.          7

### Unit - II

3. a) Discuss the different types of mobile services provided by GSM? Explain each in brief.          7

   b) Explain the architecture of GPRS?          7

OR

4. a) What is mobility management? Discuss its various functions.          7

   b) Explain briefly:-          7

   i)  TETRA          ii) UMTS

### Unit - III

5. a) Describe the physical layer architecture of 802.11 standard.          7

   b) What are the advantages and disadvantages of using bluetooth based devices as a sensor network? Explain. 7

OR

6. a) Draw and explain HIPERLAN-2 protocol. Stack.          7

   b) What will be the impact on piconet in bluetooth devices are connected to mobile Units? Explain.          7

### Unit - IV

7. a) Explain how routing is performed on ad.hoc networks. 7

   b) What do you understand by mobile IP? Discuss its basic operation.          7

OR

8. a) What is DHCP? How does DHCP support dynamic address allocation?          7

   b) Write short notes:-          7

   i)  Snooping TCP

   ii) Mobile TCP

### Unit - V

9. a) Differentiate between viruses and related threads and worms.          7

   b) What is firewall? Explain the design principle of firewall?          7

OR

10. Write short notes:-          14

   a) Intruders

   b) Password Management

   c) Trojan Horse

   d) Biometrics

IT-702

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