

REGISTER NO:

--	--	--	--	--	--	--	--	--	--

B.E/B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, NOV/DEC 2011

INFORMATION TECHNOLOGY BRANCH

SIXTH SEMESTER (REGULATION – 2008)

IT9352 – WIRELESS NETWORKS

Time: Three Hours

Max.Marks: 100

Answer ALL Questions

Part – A (10 x 2 = 20 Marks)

- 1 What is mean by training sequence? How is it helpful in wireless transmission?
- 2 Give the basic principle of CDMA.
- 3 How does IEEE 802.11a PHY layer differ from that of IEEE 802.11 PHY layer?
- 4 Briefly note a method of accessing wireless medium where you can avoid collision to the maximum extent.
- 5 What are the problems related to the use of DHCP?
- 6 What are the functions of SGSN and GGSN in GPRS? Also give two advantages of GPRS over GSM.
- 7 Distinguish proactive and reactive routing.
- 8 What is time-out freezing in TCP?
- 9 What are the features of WML?
- 10 What is SyncML?

Part – B (5 x 16 = 80 Marks)

11. Explain the following MAC protocols: DAMA, PRMA, and MACA. And also (16)
explain how MACA solves the hidden terminal problem?
12. (a) Discuss in detail about the DFWMAC-DCF and DFWMAC-PCF of IEEE (16)
802.11.

(OR)

- 12 (b)
 - (i) Discuss the HIPERLAN-1 PHY and MAC layers in detail (8)
 - (ii) Briefly explain the base band layer and L2CAP of Bluetooth. (8)
- 13 (a) Explain the following:
 - (i) Architecture of GPRS. (8)
 - (ii) Authentication in GSM. (8)

(OR)

- 13 (b) Illustrate the following situations with the help of a diagram. Mobile User A (Whose Home network is in Mumbai) has moved to Delhi and Mobile User B (Whose Home network is in Delhi) has moved to Mumbai. **(16)**

(i) Both the users want to communicate now. Show the updates taking place in all databases and explain how the communication taking place.

(ii) A landline user (Delhi) wants to talk to user A. Explain in detail, how the communication is taking place.

- 14 (a) What is routing? Explain in detail about the DSR routing protocol used in adhoc networks. Also explain how route caching helps in handling link failures. **(16)**

(OR)

- 14 (b) Discuss in detail about the classical indirect TCP, snooping TCP and transaction-oriented TCP. **(16)**

- 15 (a) Give WAP architecture and explain with an example, how the communication is taking place between the client and server passing through all protocols. **(16)**

(OR)

- 15 (b) What is the role of a WTA server? What are the different ways of integrating WTA servers into the WAP architecture? **(16)**