EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION MAY 2011

CS 04 804 E / IT 04 802 : MOBILE COMMUNICATION SYSTEMS

Time: Three Hours

Answer all questions.

Part A

- 1. (a) Write a short note on Differential PSK.
 - (b) How can the gain of an antenna be improved?
 - (c) Name the main elements of the GPRS system architecture and describe their functions.
 - (d) Write a short note on DVB.
 - (e) Illustrate various states of a Bluetooth device.
 - (f) What are the functions of the registration procedure in WATM?
 - (g) Explain the purpose of using DHCP.
 - (h) How to integrate WTA servers into the WAP architecture?

 $(8 \times 5 = 40 \text{ marks})$

Part B

Module I

2. (a) Explain the various methods of increasing the capacity of users in cellular system.

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(b) Illustrate the TDMA based Collision avoidance MAC protocols.

Module II

3. (a) Why are so many different identifiers/addresses needed in GSM? How and where is user related data stored and protected in the GSM system?

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(b) Briefly explain about system architecture and Protocol architecture of DECT.

Module III

4. (a) Briefly explain protocol architecture of HIPERLAN.

Or

(b) Discuss MAC management functions with neat sketch.

Module IV

5. (a) What is the reaction of standard TCP in case of packet loss? How is packet loss handled in case of wireless network?

Or

- (b) (i) Illustrate the steps followed by MN when it moves away from home network.
 - (ii) Draw a neat diagram of WTA architecture. Explain.

 $(4 \times 15 = 60 \text{ marks})$