B.E. Sem VII (Rev) IT Mobile Computing 27/5/05

Con. 2101-05. (REVISED COURSE) AM-8473

(3 Hours) [Total Marks : 100

N.B. :— (1) Question **1** is **compulsory**. Attempt any **four** out of remaining.
(2) Marks to the **right** indicate **full** marks.
(3) Make suitable assumptions whenever necessary and clearly justify them.

1. (a) Compare SDMA, TDMA, FDMA and CDMA. **20**
   (b) What are the limitations of GSM cell in terms of diameter and capacity (voice, data) for the traditional GSM, HSCSD, GPRS ? How can the capacity be increased ?

2. (a) In relation to GSM, Explain the following :— **20**
      (i) 0.3 GMSK modulation for speech
      (ii) Number of channels and bandwidth allocated to the system.
      (iii) Bit pattern of time slot.
   (b) Explain DECT system architecture reference model and protocol architecture.

3. (a) Explain localization of user in satellite network. **20**
   (b) Compare Iridium, Globstar, ICO, Teledesic.

4. (a) Explain Digital Video broadcasting ? **20**
   (b) How does dynamic source routing handle routing ? What is motivation behind dynamic source routing compared to other routing algorithm from fined networks.

5. (a) Compare 802.11, a,b,g. **20**
   (b) Explain Power management in JEEE 802.11 infrastructure networks and ad-hoc network.

6. (a) Explain how tunnelling works in general and especially for mobile IP using IP-in-IP, minimal, and generic routing encapsulation respectively. Discuss the advantages and disadvantages of these three methods. **20**
   (b) Explain three basic handover scenario for WATM.

7. Write notes on any **two** of the following :— **20**
   (a) I - TCP, Snooping TCP, M-TCP.
   (b) Architecture and protocol supported by WAP.
   (c) WTA logical architecture.
