GUJARAT TECHNOGICAL UNIVERSITY
DIPLOMA IN   INFORMATION TECHNOLOGY

SEMESTER- VI

Subject Name: **MOBILE COMPUTING**

Sr. No.	Subject Content	Hrs.
1	**1.0 Introduction to mobile computing.** 1.1. Evolution of mobile computing 1.2. Mobile computing functions 1.3. Architecture for mobile computing 1.4. Adhoc networks 1.5. Middleware and Gateways 1.6. Application and Services 1.7 Security and Standards	7
2	**2.0 Mobile Network and Transport Layer** 2.1 Mobile IP 2.2 Packet Delivery, handover management and Location management 2.3 Registration, Tunneling and encapsulation 2.4 Dynamic host configuration 2.5 Indirect, snooping and Mobile TCP 2.6 TCP over 2.5/3.0 G mobile	10
3	**3.0 Wireless LAN** **3.1** Introduction 3.2 Architecture 3.3 Types 3.4 Roaming Issues	7
4	**4.0 Wireless Application languages and operating systems** 4.1 Understanding of Wireless Application languages 4.2 XML,JAVA,J2ME,JAVA CARD 4.3 Understanding of Mobile operating system 4.4 Palm OS,Windows CE, 4.5 Symbian,Linux	9

5	**5.0 CDMA technology** 5.1 Spread spectrum technology 5.2 Architecture 5.3 Speech and channel coding 5.4 Channel structure 5.5 Call processing 5.6 Channel capacity 5.7 CDMA vs. GSM	9
	Total	42

Laboratory Experiences:

1. To understand architecture of Mobile computing
2. To setup wireless LAN.
3. To understand mobile transport layer.
4. To understand mobile network layer.
5. To understand Mobile languages
6. To understand Mobile operating systems
7. To study call processing in CDMA mobile technology.

Reference Books:

1. **Mobile Computing:** by **Asoke K Talukder** **TMH**
2. **Mobile communication:** by **Rappaport** **PHI**
3. **Mobile Computing:** by **Raj Kamal** **OXFORD**