GUJARAT TECHNOLOGICAL UNIVERSITY

Communication Engineering

M.E. Semester: IV

Subject Name: **Wireless and Mobile Network Architectures**

Sr. No.	Course Content
1.	Introduction to wireless and Mobile communication, Introduction to GSM system, Cell design concept, Interference issues in Wireless system.
2.	Mobility management, handoff management- Detection , Assignment and Radio link transfer
3.	IS-41 signaling, Intersystem handoff and Authentication in IS-41, PACS Network Signalling
4.	Cellular Digital Packet data, GSM system overview, GSM network Signalling, GSM Mobility management, GSM Short message service and international Roaming for GSM
5.	GSM Operations, Administration and Maintenance
6.	General Packet Radio Service(GPRS)
7.	Wireless application Protocol (WAP)
8.	3G Mobile services and Wireless Local Loop (WLL)
9.	Mobile IP : Introduction ,Mobility requirements and constraints in an IP environment, Mobile IP Protocol Overview, Route Optimization, Mobility Support for IPv6, Connectivity with 3G Networks

Reference Books:

1. Wireless and Mobile network Architectures, Yi-Bang Lin and Imrich Chlamtac, Wiley-India Edition.
2. Mobile and Personal Communication Systems and Services, Raj Pandya, PHI, 2001.
3. Wireless Communications & Networks, William stallings, 2/e, Pearson,Prentice Hall, 2009.
4. Handbook of Wireless Networks and Mobile Computing ,Ivan Stojmenivic, Wiley india Edition,2009
5. Mobile IP : Design Principles And Practice By Charles E. Perkins Addition Wesley Wireless Commu.Series