PET8J001   **MOBILE COMPUTING**

<u>MODULE – I</u>   **(10 Hours)**
Introduction to Personal Communications Services (PCS): PCS Architecture, mobility management, Networks signaling; Global System for Mobile Communication (GSM) System.

Overview: GSM Architecture, Mobility management, Network signaling; General Packet Radio Services (GPRS): GPRS Architecture, GPRS Network Nodes, Mobile Data Communication; WLANs (Wireless LANs) IEEE 802.II standard.

<u>MODULE–II</u>   **(14 Hours)**
Wireless Application Protocol (WAP): The Mobile Internet standard, WAP Gateway and Protocols, wireless mark up Languages (WML).

Wireless Local Loop (WLL): Introduction to WLL Architecture, wireless Local Loop Technologies. Third Generation (3G) Mobile Services: Introduction to International Mobile Telecommunications 2000 (IMT 2000) Vision.

<u>MODULE–III</u>   **(4 Hours)**
Global Mobile Satellite Systems; case studies of the IRIDIUM, ICO and GLOBALSTAR systems.

<u>MODULE-IV</u>   **(8 Hours)**
Wireless Enterprise Networks: Introduction to Virtual Networks, Blue tooth technology, Blue tooth Protocols; Server-side programming in Java, Pervasive web application architecture, Device independent example application.

<u>ADDITIONAL MODULE</u> **(Terminal Examination-Internal)   (6 Hours)**
Wideband Code Division Multiple Access (W-CDMA) and CDMA 2000; Mobile IP.

Text Books
1. Mobile Communication, J. Schiller, Pearson Education,2nd Edition,2003
2. Mobile Computing, Raj Kamal, Oxford University Press
3. Pervasive Computing, Burkhardt, Pearson Education,2002.
4. Mobile Computing, Talukder, TMH, 2nd Edition,2010.

Reference Books
1. Wireless Communication & Networking, Garg, Elsevier,1st Edition,2007.
2. Mobile Computing,P.K. Patra, S.K. Dash, Scitech Publications,2011
3. Principles of Mobile Computing, Hansmann, Merk, Springer, 2nd Edition,2003.
4. Third Generation Mobile Telecommunication Systems, P. Stavronlakis, Springer,1st Edition,2001.
5. The Wireless Application Protocol, Sandeep Singhal, Pearson Education,2000.