MOBILE COMPUTING

Course Code: CS8PE311 **Credits: 3-0-0-0-3**

UNIT I: Mobile computing Architecture **8 Hrs**

Architecture for Mobile Computing, Three-tier Architecture, Design Considerations for Mobile Computing, Making Existing Applications Mobile-Enabled.

UNIT II: Emerging Technologies **8 Hrs**

Introduction, Bluetooth, Radio Frequency Identification (RFID), Wireless Broadband (WIMAX), Mobile IP.\

UNIT III: Global System for Mobile Communication (GSM) **8 Hrs**

Global System for Mobile Communications, GSM Architecture, GSM Entities, Call Routing in GSM, Network Aspects in GSM, Mobility Management, Personal Communication Service.

UNIT IV: Short Message Service (SMS) and Wireless Application Protocol (WAP) **8 Hrs**

Short Message Service (SMS), Value Added Service through SMS, Introduction to WAP, WAP, MMS.

UNIT V: General Packet Radio Service (GPRS) **7 Hrs**

Introduction, GPRS and Packet Data Network, GPRS Network Architecture, GPRS Network Operations, Data Services in GPRS, Applications for GPRS, Limitations of GPRS, Billing and Charging in GPRS.

Text Books:

1. Dr.AshokTalukder,MsRoopaYavagal,Mr.HasanAhmed:Mobile Computing,Technology,Applications and Service Creation,2nd Edition,Tata McGraw Hill,2010.

Reference Books:

1. Raj kamal:MobileComputing,Oxford University Press,2007.
2. ItiSahaMisra:Wireless Communications and Networks,3G and Beyond,Tata McGraw Hill,2009.

Course Outcomes:

1. Illustrate the various design Considerations for Mobile Computing.
2. Able to understand various Emerging Technologies.
3. Acquire the knowledge to describe the different aspects of mobile Communication Networks.
4. Able to understand the concept of SMS and WAP Applications.