OBJECTIVE

To study the details of lower layers of mobile architectures in the context of pervasive computing and mobile applications.

UNIT – I PERVERSIVE COMPUTING

Basics and vision – Applications and requirements – Smart devices and services – Smart mobiles, cards and device networks.

UNIT – II MOBILE APPLICATIONS


UNIT – III MEDIUM ACCESS AND TELECOMMUNICATIONS


UNIT – IV WIRELESS NETWORKS

Infrared vs radio transmission – Infrastructure and ad hoc networks – IEEE 802.11 – HIPERLAN – Bluetooth – WiMAX.

UNIT – V MOBILE NETWORK AND TRANSPORT LAYERS

Mobile IP – DHCP – Mobile ad hoc networks – TCP improvements – TCP over 2.5/3G.

TOTAL: 45

TEXT BOOKS:

REFERENCES:

1. Zigurd Mednieks, Laird Dornin, G,Blake Meike and Masumi Nakamura
The objective of this paper is to outline new facilities within an integrated environment supporting design collaboration. The details of the architecture and issues regarding explicit support for collaboration mechanisms are presented. This research focuses on the impact of alternative collaborative virtual environments on design behaviour and collaborative processes. An experiment was conducted to identify similarities and differences between co-located collaborative designing using sketches as the external representation and remote collaborative designing sessions using sketches and 3-D models. The results of this study are discussed in terms of: (1) the effect of being remotely located; (2) the effect of the type of external representations. Mobile and Pervasive Computing - 1. Introductory Lecture Presented by: Dr. Adeel Akram. University of Engineering and Technology, Taxila, Pakistan. http://web.uettaxila.edu.pk/CMS/AUT2016/teMPcms. Agenda. Ubiquitous Computing, Virtual Reality, Nomadic and Mobile. Computing, Future of Computing and Internet of Things, Books, Research Papers and Projects, History of Ubicomp, Core Concepts, Trends and Issues. What is Ubiquitous Computing (ubicomp). Section 2: Mobile Computing, Reza B'Far. Mobile Computing Principles: Designing and. Developing Mobile Applications with UML and XML. Cambridge University Press, 2005.