

MOBILE COMPUTING

Unit I

Introduction: Mobile and Wireless Devices – Simplified Reference Model – Need for Mobile Computing – Wireless Transmission – Multiplexing – Spread Spectrum and cellular systems – Medium Access Control – Comparisons

Unit II

Telecommunications System: Telecommunication System – GSM – Architecture – Sessions – Protocols – Hand over and Security – UMTS and IMT 2000 – Satellite System

Unit III

Wireless LAN : IEEE 802.11 – Hiper LAN – Bluetooth – MAC Layer – Security and Link Management.

Unit IV

Mobile IP: Goals – Packet Delivery – Strategies – Registration – Tunneling and Reverse Tunneling – Adhoc Networks – Routing Strategies

Unit V

WIRELESS APPLICATION PROTOCOL: Wireless Application Protocol (WAP)– Architecture – XML – WML Script – Applications

Text Book(s)

1. Jochen Schiller, “Mobile Communication”, Pearson Education, Delhi, 2000.

References

1. “The Wireless Application Protocol: Writing Applications for the Mobile Internet”, Sandeep Singhal, et al.