Annexure - III

CA831 MOBILE COMMUNICATIONS AND COMPUTING

UNIT I INTRODUCTION TO MIDDLE WARE

Emergence of Middleware – objects, web services- middleware Elements, V Architecture- Interoperability – middleware in Distributed applications – Types of Middl Tansaction Oriented Middleware MOM-RPC

UNIT II WIRELESS PROTOCOLS

Issues and challenges of Wireless networks – Location management, Res management, Routing, Power management, Security. Wireless Media Access Techniq ALOHA , CSMA, Wireless LAN , MAN , IEEE 802.11 (a,b,e,f,g,h,i),,Bluetooth. Protoco 3G & 4G cellular networks – IMT – 2000,UMTS, CDMA2000, Mobility managemen handover Technologies, All-IP based cellular Network

UNIT III ADHOC NETWORKS

Introduction and Definitions, Adhoc Network Applications, De Challenges. Evaluating Adhoc Network Protocols -the Case for a Test bed. Routing in M Adhoc Networks: Introduction, Flooding. Proactive Routing. On Demand Routing. Proa Versus on demand Debate. Location based Routing.

UNIT IV NETWORK ISSUES

Mobile IP - DHCP - Mobile transport layer - Indirect TCP - Snooping TCP - Mobile T - Transmission / timeout freezing - Selective retransmission - Transaction oriented TCP.

UNIT V APPLICATION ISSUES

Wireless application protocol - Dynamic DNS - File systems - Synchronization protoc Context-aware applications - Security - Analysis of existing wireless network .

References

1.Qusay H.Mahmound , "Middleware for Communication" John wiley and sons, 2004

2. J. Schiller, Mobile Communications, Addison Wesley,2000.

3. William C.Y.Lee, Mobile Communication Design Fundamentals, John Wiley,1993

4. Theodore S. Rappaport, Wireless Communications, Principles and Practice, Prentice Hall, 1996.

5. W. Stallings, Wireless Communications & Networks, Prentice Hall, 2001.

6. Prasant Mohapatra and Srihanamurthy, "Ad Hoc Networks Technologies and Protocols", Springer, Springer International Edition, 2009.

Mrs-RB

Mrs. Sheela for Senate