C-DAC &Gujarat Technological University
M.E. Computer Engineering
(Wireless Mobile Computing)
Gandhinagar

Semester: II

Subject Name: Mobile Adhoc Networks

Subject Code: 2725303

Course Content:
Introductory concepts: Different models of operation. Various applications of MANET, Destination-Sequenced Distance Vector protocol: Overview, route advertisement, extending base station coverage. Properties of DSDV protocol, Dynamic Source Routing protocol: Overview and properties, DSR route discovery, route maintenance. Support for heterogeneous networks and mobile IP. Multicast routing with DSR Ad Hoc On-Demand Distance-Vector protocol: Properties, unicast route establishment, multicast route establishment. Broadcast. Optimizations and Enhancements Link Reversal Routing: Gafni-Bertsekas algorithm, lightweight mobile routing algorithm. Temporally ordered routing algorithm Preserving battery life of mobile nodes: Associatively based routing, effects of beaconingon battery life

Text Book:

1. C. Siva Ram Murthy and B.S. Manoj "Ad Hoc Wireless Networks: Architectures and Protocols", Prentice Hall PTR, 2004

References Books:

1. C.K. Toh, Ad Hoc Mobile Wireless Networks: Protocols and Systems, Prentice Hall PTR , 2001
2. Charles E. Perkins, Ad Hoc Networking, Addison Wesley, 2000