UNIT 1

1. Write a short note on IEEE 802.11 Standard.
2. What is HIPERLAN Standard and write the different standards of HIPERLAN.
3. Write a short on Bluetooth Technology
4. What is HOME RF and write the technical features of HOME RF
5. State the differences between network initiated and mobile initiated handoff?
6. What is WAP and discuss the main goals of WAP.
7. What are the four major categories of optimizations of WEB over WIRELESS

UNIT-2

1. Explain the wireless sensor network with its issues compared to ad-hoc network.
2. Briefly explain the following with proper diagrams:
   i. Cellular wireless network.
   ii. ad-hoc wireless network.
   iii. Hybrid wireless network.
   iv. Wireless sensor network.
3. Discuss the following major issues and challenges that need to be considered when an ad-hoc wireless system is to be designed
   i. Medium access scheme
   ii. Routing
   iii. Transport layer protocol
   iv. Self organization
   v. Address and service discovery
   vi. Scalability
4. Describe in detail about the MACAW and MACA-BY-invitation protocols.
5. Explain any 2 contention based with preservation mechanism MAC protocols.
6. Discuss the major issues to be considered for a successful ad-hoc wireless internet.
7. Explain the classification of MAC protocols.
8. Briefly discuss the following:
   i. Quality of service support
   ii. Hidden and exposed terminal problem
   iii. Mobility of nodes
   iv. Error prone shared broadcast channel
9. Briefly discuss the following:
   i. Contention based protocols
   ii. Contention based protocols with reservation mechanisms
   iii. Contention based protocols with scheduling mechanisms
10. What are the advantages of reservation based MAC protocols over contention based MAC protocols.

UNIT 3

1. Explain any one table driven routing protocol for ad-hoc wireless network
2. With an example, explain the process of route establishment in wireless routing protocol
3. Explain the temporary ordered routing algorithm and its advantages and disadvantages
4. Discuss the differences in topology reorganization in DSDV and CGSR routing protocols .
5. Explain the salient features and topology maintenance/routing information maintenance in cluster head gateway switch routing protocol

7. Explain route establishment in DSDV with an example
8. List the characteristics of an ideal routing protocol for and ad-hoc wireless n/w.
9. Explain core contention based distributed ad-hoc routing protocol .
10. Explain the various routing metrics .
11. Explain the "optimal link state routing" with diagram.
12. Explain the following proper aware routing metrics:
    i. Minimal energy consumption per packet
    ii. Maximize network connectivity
    iii. Minimum variance in node power level iv. Minimum cost per packet
    v. Minimize maximum node cost
13. Explain any 1 hierarchical routing protocol.
14. Discuss the adv and disadvantage of zone routing protocol and zone based hierarchical link state routing protocol.
15. Explain the issues and design goals of transport layer protocol for ad-hoc wireless network
16. Explain ad-hoc and split TCP

UNIT-4
1. What are the different issues and challenges in providing QoS in ad-hoc wireless networks.
2. What are the different types of QoS Solutions of ad-hoc networks
3. What are the network layer solutions of ad-hoc networks
4. What is energy management and Explain the different types of energy management schemes
5. What is energy management of ad-hoc networks.
6. What are the disadvantages of clustering in ad hoc wireless networks.

UNIT-5
1. What are the Designing issues and Challenges in a Sensor Networks
2. What are the different types of Sensor Network Architecture and Explain in detail about the Layered architecture.
3. What are the different Evaluating Standards of a wireless Sensor Networks
4. What are the different issues explored in a Wireless Sensor Networks.