

BT-6/M-23

46170

**MOBILE-AD-HOC AND WIRELESS SENSOR
NETWORKS**

Paper-PE-CS-S308A

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt *five* questions in all, selecting at least *one* question from each unit. All questions carry equal marks.

UNIT-I

1. (a) What are the characteristics of Mobile Ad-hoc Networks? Discuss.
(b) What are the major issues in MAC protocol for Ad-Hoc networks? Explain.
2. (a) What are the issues that the design of a location management scheme must address in Mobile Ad-hoc Networks? Discuss.
(b) What are the applications of MANET? Discuss.

UNIT-II

3. (a) What is the principle of fisheye state routing? What are its drawbacks? Discuss.
(b) What is Ad-hoc on demand distance vector routing system? Explain.

4. (a) What is the difference between proactive and reactive routing protocols? Discuss the Destination Sequenced Distance Vector Routing Protocol (DSDV).
- (b) What is Temporally ordered routing algorithm (TORA)? What are the basic functions in this protocol? Discuss.

UNIT-III

5. (a) What are the security issues in Ad-hoc networks? Write a note on Self-Policing Mobile Ad-hoc Networks by Reputation Systems.
- (b) What are the functions of network layer in Ad-hoc networks? Discuss.
6. (a) What are the different criteria for clustering in Wireless Sensor Networks? Discuss.
- (b) What is the significance of security keys in Mobile Ad-hoc networks? Explain.

UNIT-IV

7. (a) What is the function of MAC layer? Discuss the MAC layer in Wireless Sensor Networks.
- (b) What is an example of sensor data? What is sensor network database? Discuss.
8. (a) What are the majors concerns in WSN Operating Systems design? Explain.
- (b) Write a note on Low energy adaptive clustering hierarchy (LEACH).
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