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).