



- Notes :
1. Solve Question 1 OR Questions No. 2.
 2. Solve Question 3 OR Questions No. 4.
 3. Solve Question 5 OR Questions No. 6.
 4. Solve Question 7 OR Questions No. 8.
 5. Solve Question 9 OR Questions No. 10.
 6. Solve Question 11 OR Questions No. 12.
 7. Due credit will be given to neatness and adequate dimensions.
 8. Assume suitable data whenever necessary.
 9. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) What is WSN? Explain various application example of available WSN? 7
b) What are the challenges of WSN. 6

OR

2. a) Differentiate between MANET and Wireless Sensor Network. 6
b) Explain the sensor Node architecture used in WSN, 7
3. a) Describe in detail about 'Tinyos' 8
b) Explain in detail Event - Based Programming model. 6

OR

4. a) Write short note on Energy scavenging in WSN. 6
b) Describe in detail about nesC Defuming modules and components, 8
5. a) Explain the various optimization goals of WSN. 7
b) Explain in detail Gateway concepts of WSN. 6

OR

6. a) Explain the different sources of mobility. 7
b) Explain in detail about multihop network in WSN. 6
7. a) Describe in detail the various types of addresses and names used in sensor network. 7
b) How geographic addressing is done in WSN. 6

OR

8. a) Explain Geographic Adaptive Fidelity (GAF) in detail. 6
b) What is cluster in WSN? Explain the basic algorithm to construct independent sets. 7
9. a) Explain the Broad - casting using minimal cost-spanning tree (Prim's Algorithm) in WSN. 7
b) Draw an overview of possible multicast approaches used in WSN. 6

OR

10. a) What is data aggregation; what are the metrics used for data aggregation in WSN. 7
b) Write a short note on "Data centric routing". 6
11. a) Describe in detail How Target detection and Tracking is done in WSN. 8
b) Explain the different security goals used for WSN. 6

OR

12. Write short note on **any three**. 14
- i) Contour determination.
 - ii) Syndrome coding.
 - iii) Denial of service attack in WSN.
 - iv) Localized Edge detection.
