

## FACULTY OF ENGINEERING

B.E. 4/4 (CSE) I – Semester (Main) Examination, December 2011

Subject: **Adhoc and Sensor Networks (Elective – I)**

Time: 3 Hours

Max. Marks: 75

**Note:** Answer all questions from Part A. Answer any Five questions from Part B.

### PART – A (25 Marks)

- |     |   |   |
|-----|---|---|
| 1.  | Define Adhoc Networks.  | 3 |
| 2.  | What is Flooding?   | 2 |
| 3.  | What are the different topology maintenance approaches in multicasting? | 3 |
| 4.  | What is broadcasting?   | 2 |
| 5.  | Define QoS, why is it important in MANETS.                              | 2 |
| 6.  | What are the different types of potential attacks?                      | 3 |
| 7.  | List out the examples of category 2 WSN applications.                   | 3 |
| 8.  | List two applications of sensor networks.                               | 3 |
| 9.  | Define Hotspot, 3GPP.   | 2 |
| 10. | What is the use of MAC protocols?                                       | 2 |

### PART – B (5 x 10 = 50 Marks)

- 11.(a) What are the applications of Adhoc Networks?  
(b) Discuss the different design challenges in MANETS.
- 12.(a) Discuss briefly about multicasting protocols.  
(b) Explain the modification of TCP for Adhoc Networks.
- 13.(a) Explain about medium access layer.  
(b) Explain the intrusion Detection Techniques.
- 14.(a) Explain the Basic Network Achitectoral Elements.  
(b) What are the challenges and limitations of WSNS?
15. Explain CSMA / CA protocol.
16. Write short notes on any two of the following:
  - a) 4G Networks
  - b) Wiman
  - c) Location based Routing in MANET.
- 17.(a) Distinguish between proactive and reactive routing protocols.  
(b) Explain the Inter-layer design approaches.