

R13

Code No: 118AA

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year II Semester Examinations, May - 2017

ADHOC AND SENSOR NETWORKS

(Common to CSE, IT)

Time: 3 hours

Max. Marks: 75

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A**(25 Marks)**

- 1.a) What are factors that influence the routing in a MANET? [2]
- b) Explain the location based scheme. [3]
- c) What are the challenges of TCP over adhoc networks? [2]
- d) Explain the classification of nodes in the network by using CAMP. [3]
- e) Distinguish between static channel and dynamic channel allocations. [2]
- f) Explain about the Mica mote. [3]
- g) Explain the steps involved in the Burmester and Desmedt protocol. [2]
- h) What are the drawbacks of CLIQUES protocol? [3]
- i) Explain the features of Tiny GALS. [2]
- j) What are the components of TinyOS? [3]

PART - B**(50 Marks)**

2. Explain how to find the route from source to destination by using DSR protocol. [10]
- OR**
3. Explain three phases of ABR protocol. [10]
- 4.a) Explain the drawback of the TCP exponential backoff algorithm in MANETS.
 - b) Distinguish between LBM scheme 1 and LBM scheme 2. [5+5]
- OR**
5. Explain about the multicast zone routing protocol. [10]
6. Explain the design of routing protocol for WSNs which influence fault tolerance, security, connectivity, Adhoc deployment and QoS. [10]
- OR**
7. Explain about the Multipath based routing in WSNs. [10]
- 8.a) Explain the components of sensor nodes.
 - b) Explain about the GDH.3 protocol. [5+5]
- OR**
- 9.a) Explain about the N – Party Diffie Hellman Key Agreement protocol.
 - b) What are the challenges of sensor network programming? [5+5]
10. Explain the architecture of TOSSIM. [10]
- OR**
11. Explain about the ns-2 and its sensor network extension. [10]