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]

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