

Code No: 137SW

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, September - 2021

ADHOC AND SENSOR NETWORKS

(Computer Science and Engineering)

Time: 3 Hours

Max. Marks: 75

**Answer any Five Questions
All Questions Carry Equal Marks**

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- 1.a) Explain about the DSR protocol and also illustrate with an example.
- b) Discuss about the challenges of MANET. [8+7]
- 2.a) Explain about the Quorum Based Location Service in adhoc Networks.
- b) Explain the novel applications of MANETs . [8+7]
3. Explain about the mobility related solutions for TCP over adhoc networks. [15]
- 4.a) Explain the problems of Broadcasting in MANET.
- b) Describe how to reduce the time complexity in hierarchical routing by using hierarchy? [7+8]
- 5.a) Explain the design of routing protocol for WSNs which influence the transmission media, communication range, control overhead, energy consumption without losing accuracy and adhoc deployment.
- b) What are the advantages of WSNs over wired networks? [8+7]
- 6.a) Explain how to distribute the sensors randomly in wireless sensor networks.
- b) Describe the design issues which are involved in the design of MAC protocols in WSNs. [7+8]
- 7.a) Explain about the N-Party Diffie Hellman key Agreement protocol.
- b) Explain the requirements of security in adhoc sensor networks. [8+7]
- 8.a) Describe the architecture of TOSSIM with neat sketch.
- b) Explain about the component types of nesC. [8+7]

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