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10CS/IS841

**Eighth Semester B.E. Degree Examination, Jan./Feb.2021**  
**Adhoc Networks**

Time: 3 hrs.

Max. Marks:100

**Note: Answer FIVE full questions, selecting at least TWO questions from each part.**

**PART – A**

- 1 a. Explain the major issues in Adhoc Networks while designing MAC protocol. (08 Marks)  
b. Explain any four applications of Adhoc wireless network. (06 Marks)  
c. Explain the major issues in Adhoc Wireless Internet. (06 Marks)
- 2 a. Explain MARCH protocol for Adhoc Wireless Network. (10 Marks)  
b. Explain with example the working of five phase reservation protocol. (10 Marks)
- 3 a. Explain distributed priority scheduling mechanism with neat diagram in adhoc wireless network. (10 Marks)  
b. Explain directional busy tone based MAC protocol. Write the advantages. (10 Marks)
- 4 a. Explain the classification of Routing protocols. (08 Marks)  
b. Explain cluster-head Gateway switch Routing protocol in Adhoc networks. (08 Marks)  
c. What are the ideal characteristics of Routing protocol for Adhoc networks? (04 Marks)

**PART – B**

- 5 a. Explain zone-based hierarchical link state routing protocol with neat diagram. (10 Marks)  
b. Explain the power aware routing metrics in adhoc networks. (10 Marks)
- 6 a. Explain the issues and design goals of transport layer protocol for adhoc wireless networks. (10 Marks)  
b. Discuss the operation of feedback based TCP with a suitable example. (10 Marks)
- 7 a. Explain different attacks pertaining to network layer. (10 Marks)  
b. Explain symmetric key algorithm. (05 Marks)  
c. Explain security-aware adhoc routing protocol. (05 Marks)
- 8 a. Give layer wise classification of existing QoS solution. (08 Marks)  
b. Write notes on:  
(i) Real time traffic support in Adhoc Network.  
(ii) Cluster TDMA. (12 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.