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06CS/IS841

Eighth Semester B.E. Degree Examination, May/June 2010
ADHOC Networks

Time: 3 hrs. Max. Marks:100

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

PART – A

1 a. Give any five differences between cellular wireless networks and ADHOC wireless networks. **(05 Marks)**
b. Explain any six issues of ADHOC wireless networks. **(12 Marks)**
c. Write a note on ADHOC wireless internet. **(03 Marks)**

2 a. Describe in detail, MACAW and MACA-BY-invitation protocols. **(10 Marks)**
b. Explain any two contention based with preservation mechanism MAC protocols. **(10 Marks)**

3 a. Explain :
i) Distributed priority scheduling MAC protocol
ii) Distributed wireless ordering MAC protocol. **(08 Marks)**
b. Describe the working mechanism of MAC protocol using directional antennas. Also in brief, explain one protocol in this category. **(12 Marks)**

4 a. What are the characteristics of routing protocol for ADHOC network? **(08 Marks)**
b. Give the classification of routing protocols for ADHOC wireless networks. **(06 Marks)**
c. Explain any one table-driven routing protocol for ADHOC wireless networks. **(06 Marks)**

PART – B

5 a. Explain core extraction based distributed ADHOC routing protocol. **(10 Marks)**
b. Describe any two hierarchical routing protocols. **(10 Marks)**

6 a. Explain the issues and design goals of transport layer protocol for ADHOC wireless networks. **(10 Marks)**
b. Explain ADHOC and split TCP. **(10 Marks)**

7 a. Give the classification of security attacks in ADHOC wireless networks. **(06 Marks)**
b. Describe the symmetric key algorithm for security. **(06 Marks)**
c. Explain the key management in ADHOC wireless networks. **(08 Marks)**

8 a. Explain the issues and challenges in providing QoS in ADHOC wireless networks. **(10 Marks)**
b. Explain :
i) Cluster TDMA protocol for MAC layer QoS
ii) Ticket-based QoS routing protocol QoS. **(10 Marks)**

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