USN ☐☐☐☐☐☐☐☐☐☐ **06CS/IS841**

Eighth Semester B.E. Degree Examination, June 2012
Ad-Hoc Network

Time: 3 hrs. Max. Marks:100

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

PART – A

1 a. Differentiate between cellular networks and ADHOC networks. **(10 Marks)**
   b. Explain any six issues of ADHOC wireless networks. **(10 Marks)**

2 a. Define soft reservation. Explain soft reservation multiple access with priority assignment (SRMA/PA), using frame structure. **(10 Marks)**
   b. Briefly explain the five phase reservation protocol (FPRP) with frame structure. **(10 Marks)**

3 a. Describe the working mechanism of MAC protocol, using directional antennas. Also in brief, explain one protocol in this category. **(14 Marks)**
   b. Discuss about the classification of channel based on their usage in multichannel MAC protocol. **(06 Marks)**

4 a. Explain route establishment in DSDV (Destination Sequenced Distance – Vector Routing Protocol) with an example. **(10 Marks)**
   b. List the characteristics of an ideal routing protocol for an ADHOC wireless network.
   (10 Marks)

PART – B

5 a. Explain any one hierarchical routing protocol. **(12 Marks)**
   b. Discuss the advantages and disadvantages of zone routing protocol and zone-based hierarchical link state routing protocol. **(08 Marks)**

6 a. Discuss briefly any five reasons. Why TCP does not perform well in ADHOC wireless networks? **(10 Marks)**
   b. Briefly explain the state transition diagram for ADHOC – TCP sender (ATCP). **(10 Marks)**

7 a. Briefly discuss the network layer attacks. **(10 Marks)**
   b. Explain the key management in ADHOC wireless networks. **(10 Marks)**

8 a. Explain the issues and challenges in providing QoS in ADHOC wireless networks. **(10 Marks)**
   b. Explain QoS – enabled ADHOC on–demand distance vector routing protocol. **(10 Marks)**

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