Duration: 3 Hours

Total Marks assigned: 80

N.B.: (1) Question No. 1 is compulsory.
(2) Attempt any three of remaining five questions.
(3) Assume any suitable data if necessary and clearly state it.

1 a. Exemplify the exposed terminal problem. 05
   b. Describe Wireless Mesh Networks in brief 05
   c. Illustrate the need for power management in ad hoc network. 05
   d. Brief the major classification of MAC protocol for ad hoc wireless network 05

2 a. Discuss any one hierarchical routing protocol of AWN. 10
   b. Describe the operation of Directional-MAC protocol in detail. 10

3 a. Illustrate various steps involved in five phase reservation protocol (FPRP) with its frame format. 10
   b. What is count to infinity problem? How DSDV protocol provides solution to address the problems of looping and count to infinity? Explain with an example. 10

4 a. Illustrate the route discovery and route maintenance processes in On-demand QoS routing Protocols. 10
   b. How does the link failure situation is handled in AODV protocol? Explain with an example 10

5 a. Illustrate the Temporally Ordered Routing Algorithm (TORA) along with its advantages and limitations. 10
   b. Briefly explain the state transition diagram for Adhoc TCP sender (ATCP). 10

6 Write a short note on the following 20
   a. Issues and challenges faced in providing QoS.
   b. Various security attacks in application layer
   c. 802.11g IEEE standard
   d. Security aware adhoc routing.

--------- x ---------