

R09

Code No: D5507

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.Tech II - Semester Examinations, March/April 2011

ADHOC WIRELESS AND SENSOR NETWORKS

(EMBEDDED SYSTEMS)

Time: 3hours

Max. Marks: 60

**Answer any five questions
All questions carry equal marks**

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1. a) Describe the services provided by Bluetooth.
b) What are the major issues and challenges that need to be considered for designing adhoc wireless system? [6+6]
2. a) Describe the design goals of a MAC Protocols for ad hoc wireless networks.
b) Explain the role of directional antennas in MAC protocols. [6+6]
3. a) List out various issues in designing a routing protocol for Ad hoc wireless networks.
b) Describe about various types of hybrid routing protocols. [6+6]
4. a) Explain briefly about QoS frame works.
b) Discuss about classifications of ad hoc wireless networks. [6+6]
5. a) Explain the operation of security aware adhoc routing (SAR) protocol.
b) Compare fixed allocation, demand based and contention- based MAC protocols for sensor networks. [6+6]
6. a) Discuss about quality of sensor network.
b) Explain the classifications of MAC Protocols. [6+6]
7. a) Draw and explain sensor network architecture.
b) Explain transmission power management schemes. [6+6]
8. Write a brief note on:
i) WAP
ii) Contention based protocols. [6+6]
