

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

# GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. Sem. – II<sup>nd</sup> - Examination – June/July- 2011

Subject code: 1722702

Subject Name: Ad hoc Networks

Date: 24/06/2011

Time: 10:30 am – 01:00 pm

Total Marks: 70

## Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Draw and explain an electromagnetic spectrum. **07**  
(b) Discuss the architecture of PRNETs. **07**
- Q.2** (a) Enlist Ad hoc routing protocols. **07**  
(b) What is Ad hoc network heterogeneity in mobile services? **07**  
**OR**  
(b) Explain the characteristics of the wireless channel. **07**
- Q.3** (a) Discuss the issues in designing a multicast routing protocol. **07**  
(b) Discuss security issues in Ad hoc wireless networks. **07**  
**OR**
- Q.3** (a) Compare tree-based multicast routing protocols with mesh-based multicast routing protocols **07**  
(b) Discuss designing issues in transport layer protocol for Ad hoc wireless networks. **07**
- Q.4** (a) Discuss issues and challenges in providing QoS in Ad hoc wireless networks. **07**  
(b) Explain dependent multicast routing. **07**  
**OR**
- Q.4** (a) What is the need of energy management in Ad hoc wireless networks? **07**  
(b) Explain Wireless sensor networks. **07**
- Q.5** (a) Explain wireless sensor network architecture. **07**  
(b) Explain location aid routing (LAR). **07**  
**OR**
- Q.5** (a) Classify energy management schemes in Ad hoc wireless networks. **07**  
(b) Classify QoS solution in wireless Ad hoc networks. **07**

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