

GUJARAT TECHNOLOGICAL UNIVERSITY
ME - SEMESTER- II EXAMINATION – SUMMER 2015

Subject Code: 2724403**Date: 26/05/2015****Subject Name: Ad Hoc Networks****Time: 2:30 pm to 5:00 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) Differentiate infrastructure-based and infrastructure-less networks. **07**
(b) What is PRNET? Draw and explain architecture of PRNET and also discuss challenges of PRNET. **07**
- Q.2** (a) What is routing? Explain the characteristics of an ideal routing protocol for Ad hoc wireless networks. **07**
(b) Discuss the issues in designing a multicast routing protocol. **07**
- OR**
- (b) Explain Zone Based Hierarchical Link State Routing Protocol with merits and demerits. **07**
- Q.3** (a) List table driven routing protocols and explain any one with its advantages and disadvantages. **07**
(b) Compare tree-based multicast routing protocols with mesh-based multicast routing protocols. **07**
- OR**
- Q.3** (a) Explain all the components of typical IEEE 802.11 network. **07**
(b) Discuss AODV protocol with its advantage and disadvantage. **07**
- Q.4** (a) Why does TCP not performing well in ad hoc wireless networks? **07**
(b) Classify energy management schemes in Ad hoc wireless networks. **07**
- OR**
- Q.4** (a) Explain Hidden and Exposed terminal problems in AD-Hoc Wireless networks. **07**
(b) Discuss issues and challenges in providing QoS in Ad hoc wireless networks. **07**
- Q.5** (a) Explain wireless sensor network architecture. **07**
(b) Explain battery scheduling techniques to improve battery lifetime. **07**
- OR**
- Q.5** (a) Classify QoS solution in wireless Ad hoc networks. **07**
(b) Discuss designing issues in transport layer protocol for Ad hoc wireless networks. **07**
