

Q. P. Code: 37776

(3Hours)

(Total marks 80)

- Note: (1) Question No. 1 is compulsory  
 (2) Solve any three from remaining questions.  
 (3) Assume suitable data if required.



- Q1. (a) Discuss scalability issue in MANET. (5)  
 (b) Explain multicast AODV with suitable diagram. (5)  
 (c) Define in band, out of band and back up channel. (5)  
 (d) What are the challenges posed to TCP over MANETS ? (5)
- Q.2 (a) Why there was need of Cognitive Radio? Explain IEEE802.22 reference architecture with suitable diagram. (10)  
 (b) Explain Zone Routing Protocol (ZRP) with suitable diagram. (10)
- Q3. (a) What are the designing considerations for Routing Protocols in WSN. (10)  
 (b) Name the MAC layer protocols in wireless sensor networks and explain Self Organizing - MAC protocol. (10)
- Q.4 (a) Explain the various asymmetry in a TCP based wireless mobile MANET. How these asymmetry problems degrade throughput ? (10)  
 (b) Explain Voronoi diagram based Geocasting with example. (10)
- Q.5 (a) Mention features of Temporarily Ordered Routing Algorithm(TORA)and explain its height metric with suitable example. (10)  
 (b) Explain the LEACH algorithm/protocol in detail. (10)
- Q.6 Write Short Notes on followings:
- (a) Adaptive Periodic TEEN (5)  
 (b) Bluetooth security architecture (5)  
 (c) Adhoc Multicast Routing Protocol Utilizing Increasing ID numbers (5)  
 (d) Nano Sensor Networks (5)

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