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**Question Paper Code: 49402**

B.E./B.Tech. DEGREE EXAMINATION, AUGUST 2021

Elective

Electronics and Communication Engineering

14UEC902- MOBILE AD-HOC NETWORKS

(Regulation 2014)

Duration: 1:45 hour

Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

**(Answer any ten of the following questions)**

1. Define ad Hoc networks.
2. State Nyquist rate.
3. Give the classifications of MAC protocol.
4. Write the frame format of 802.11.
5. Compare proactive and reactive routing protocols.
6. How does energy aware routing works?
7. Assume that the TCP sender experiences a timeout when the current congestion window size is 48 KB. Considering the MSS of 1KB, calculate the size of the congestion window for which the next three transmissions will be successful.
8. List the issues in designing transport layer protocol.
9. Give detail about cross layer optimization
10. List the factors that affect effective cross layer design.
11. List the applications of MANET.
12. Mention the characteristics of wireless channel.
13. What are the issues of designing a MAC protocol for ad-hoc networks?
14. Differentiate between HRMA and SRMA.
15. Compare proactive and reactive routing.

PART – B (3 x 10= 30 Marks)

**(Answer any three of the following questions)**

16. Write in detail about Indoor and Outdoor models in Ad hoc mobility models. (10)
17. Describe IEEE Standards 802.15 in detail. (10)
18. Briefly discuss about Hierarchical routing. (10)
19. Briefly describe the attacks pertaining to the network layer with Neat diagram. (10)
20. Explain in detail about integration of ad hoc with mobile IP Networks (10)