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Question Paper Code: X60430

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2020 Eighth Semester

Electronics and Communication Engineering EC 2050/EC 804 – MOBILE ADHOC NETWORKS (Regulations 2008)

(Common to PTEC 2050 – Mobile Adhoc Networks for B.E. (Part-Time) Seventh Semester – ECE – Regulations 2009)

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions

PART - A (10×2=20 Marks)

- 1. What are the multipath components in Adhoc networks?
- 2. Write the transmission impediments of the wireless channel.
- 3. What are the goals of Medium Access Protocols?
- 4. Define HIPERLAN.
- 5. What does power-aware routing aim?
- 6. List the merits of geographical information assisted routing.
- 7. What are the different attacks possible over Adhoc networks?
- 8. What are the issues to be considered while designing a transport layer protocol for Adhoc networks?
- 9. What is the need for cross layer design?
- 10. What are the parameter optimization techniques available?

PART – B (5×16=80 Marks)

11. a) How the path loss and fading affects the wireless channel? Explain it. (16)

(OR)

b) i) Compare Cellular and Adhoc Wireless Networks. (8)

ii) What are the issues and challenges of Adhoc System? (8)

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| 12. | a) | Explain in detail about Contention based protocols with reservation. (OR) | (16) |
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| | b) | Describe IEEE Standards 802.15 in detail. | (16) |
| 13. | a) | i) Discuss the major challenges that a routing protocol designed for Adhoc wireless networks faces. | (10) |
| | | ii) Discuss the types of Adhoc network routing protocols based on routing information update mechanism. | (6) |
| | | (OR) | |
| | b) | i) List the characteristics of ideal routing protocol for Adhoc wireless network.ii) Classify and explain Adhoc wireless networks based on routing topology. | (10) (6) |
| 14. | a) | Explain why TCP is not able to perform well in Adhoc wireless network. (OR) | (16) |
| | b) | List out the issues of transport layer protocol design for Adhoc wireless networks. | (16) |
| 15. | a) | Describe how to integrate Adhoc with mobile IP. What are the advantages? (OR) | (16) |
| | b) | Explain any one of the cross layer optimization method and how it improve the performance of the routing Adhoc networks. | (16) |