Reg.No:



SNS College of Technology, Coimbatore-35. (An Autonomous Institution) B.E/B.Tech- Internal Assessment -I Academic Year 2023-2024(Odd Semester) Seventh Semester Electronics & Communication Engineering 19ECE402 – Wireless AD HoC and Sensor Networks



Time: 1^{1/2} Hours

Maximum Marks: 50

Answer All Questions

PART - A (5x 2 = 10 Marks)

| | | | | CO | Blooms | | |
|---------------------------------------|---|--|----|-----|--------|--|--|
| 1. | Out | Outline the challenges issues in ad hoc networks. | | | Ana | | |
| 2. | Illus | Illustrate the characteristic requirements of a wireless sensor network. | | | Und | | |
| 3. | Interpret the term Wireless fidelity systems. | | | CO1 | Und | | |
| 4. | Outline the concept of hidden terminal problem. | | | CO2 | Ana | | |
| 5. | Wha | nat is mean by node Synchronization techniques? | | | Und | | |
| PART – B $(2x13) + (1x14) = 40$ Marks | | | | | | | |
| | | | | CO | Blooms | | |
| 6. | (a) | Examine the major advantages of ad hoc wireless Internet. | 13 | CO1 | Ana | | |
| | | (or) | | | | | |
| | (b) | Examine ultra wide band radio communication in detail. | 13 | CO1 | Ana | | |
| 7. | (a) | Explain in detail Unique constraints, challenges and Vulnerabilities of ad-hoc and sensor networks. | 13 | CO1 | Und | | |
| | | (or) | | | | | |
| | (b) | Express how the scheduled based MAC protocol differs from the contention based MAC protocol. | 13 | CO2 | Und | | |
| 8. | (a) | Draw the schematic diagram of an ad hoc wireless Internet and discuss the issues to be considered for the successful ad hoc wireless Internet. | 14 | CO1 | App | | |
| | | (or) | | | | | |
| | (b) | Build the basic concepts of MAC hidden node-exposed node problems and discuss the pros and cons in the implementation. | 14 | CO2 | App | | |

Abbreviations: Co- Course Outcomes, Rem-Remembrance, Und-Understanding, App- Apply, Ana-Analyse, Eva-Evaluate, Cre-Create

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