

Code No.: CS8242PE

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**CMR ENGINEERING COLLEGE: : HYDERABAD  
UGC AUTONOMOUS**

**I-M.TECH-II-Semester End Examinations (Supply) - March- 2023  
WIRELESS AND SENSOR NETWORKS  
(CSE)**

**[Time: 3 Hours]**

**[Max. Marks: 70]**

**Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART-A**

**(20 Marks)**

1. a) List out the major application of WSN. [2M]
- b) List out the Characteristic of MANETs. [2M]
- c) Write a basic rule of MAODV routing protocol? [2M]
- d) List the hybrid routing protocol for WSN. [2M]
- e) List the MAC layer protocol used in WSN. [2M]
- f) Explain the basic architecture of WSN. [2M]
- g) Compare Sink node and Base station? [2M]
- h) List out the major responsibility of MAC layer. [2M]
- i) List out the key management methods in WSN. [2M]
- j) What is the need of security in ad hoc networks? [2M]

**PART-B**

**(50 Marks)**

2. Explain the Ad hoc networks differ from the conventional networks and their challenges. [10M]
- OR**
3. Explain the route failure and discovery mechanism in AODV routing protocol with an example. [10M]
  4. Discuss the simple flooding rebroadcasting scheme. [10M]
- OR**
5. Explain need of TCP protocol networks and list out the major application of WSN. [10M]
  6. Explain the data retrieval in wireless sensor networks. [10M]
- OR**
7. Explain the MAC Layer protocol for WSN. [10M]
  8. Discuss the transport layer protocol for sensor networks. [10M]
- OR**
9. Discuss the solution for TCP over Ad Hoc networks. [10M]
  10. Explain the intrusion detection system in networks. [10M]
- OR**
11. Explain the secure routing in mobile ad hoc networks. [10M]

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