

Seat No. **MAR_APR 2025 SUMMER EXAMINATION****1156 Master of Technology****Sub. Name: Adhoc & Wireless Sensor Networks****Sub. Code: 72684****Day and Date: JUNE ,04-06-2025****Total Marks: 70****Time: 10:30 AM To 01:30 PM**

- Instructions:**
1. All questions are compulsory
 2. Assume suitable data wherever necessary and mention it boldly
 3. Draw neat labelled diagrams wherever necessary
 4. Figures to the right indicate full marks
 5. Use Sketches/Diagrams wherever necessary

- Q1) Solve any two.....[2 × 7 = 14] [14]**
1. State and explain indoor and outdoor Adhoc models. [7]
 2. State and explain characteristics features of Adhoc networks with applications. [7]
 3. State and explain characteristics of Wireless channel in detail [7]
- Q2) Solve any two.....[2 × 7 = 14] [14]**
1. Explain in detail IEEE standards: 802.11a protocol. [7]
 2. State and explain Medium Access Protocols design issues in detail. [7]
 3. Explain MAC Contention based protocols- with reservation. [7]
- Q3) Solve any two.....[2 × 7 = 14] [14]**
1. Explain hybrid routing algorithms in detail. [7]
 2. Explain in detail routing protocols design issues. [7]
 3. Explain unicast routing algorithms and multicast routing algorithms [7]
- Q4) Solve any two.....[2 × 7 = 14] [14]**
1. Explain Energy Consumption of Sensor Nodes [7]
 2. Explain Cross layer Design: Need for cross layer design of adhoc 4G. [7]
 3. Explain WSN Single-Node Architecture with Hardware Components [7]
- Q5) Solve any two.....[2 × 7 = 14] [14]**

1. Explain Integration of Adhoc with Mobile IP networks [7]
2. Explain sensor node hardware – Berkeley Motes in detail [7]
3. Explain programming challenges for Sensor Network Platforms and Tools [7]

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

This Question Paper may be distributed for following Subjects as common code.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

- 1] (1156) Master of Technology (CBCS) (72684) Adhoc & Wireless Sensor Networks Part 1 SEM 2