

Code: 19IT4701A

**IV B.Tech - I Semester – Regular Examinations - DECEMBER 2022****ADHOC NETWORKS  
(INFORMATION TECHNOLOGY)**

Duration: 3 hours

Max. Marks: 70

- Note: 1. This question paper contains two Parts A and B.  
 2. Part-A contains 5 short answer questions. Each Question carries 2 Marks.  
 3. Part-B contains 5 essay questions with an internal choice from each unit. Each question carries 12 marks.  
 4. All parts of Question paper must be answered in one place.

BL – Blooms Level

CO – Course Outcome

**PART – A**

		BL	CO
1. a)	What is resource reservation issue in MAC Protocol designing?	L2	CO1
1. b)	How Sender-initiated protocols can be further divided? Explain it.	L2	CO2
1. c)	Define Proactive routing Protocol. Give Some Examples.	L2	CO3
1. d)	How do you classify Tree-based multicast protocols? What is the drawback of Tree-based multicast protocols?	L2	CO3
1. e)	Define Confidentiality and Integrity in Network security.	L2	CO4

## PART – B

			BL	CO	Max. Marks
<b>UNIT-I</b>					
2	a)	Differentiate cellular networks with Ad Hoc wireless networks.	L2	CO1	6 M
	b)	What are the applications of Ad Hoc Wireless Networks?	L2	CO1	6 M
<b>OR</b>					
3	a)	What are the major issues that a routing protocol faced in a wireless Ad Hoc networks?	L2	CO1	6 M
	b)	Explain the Ad Hoc wireless Internet with a diagram.	L2	CO1	6 M
<b>UNIT-II</b>					
4	a)	What are the design goals of a MAC Protocol for Ad Hoc Wireless Networks?	L2	CO2	6 M
	b)	Explain Media Access Protocol (MACAW) for Wireless LANs in detail.	L2	CO2	6 M
<b>OR</b>					
5	a)	What do you know about Floor Acquisition Multiple Access Protocols?	L2	CO2	6 M
	b)	Explain Distributed Packet Reservation Multiple Access Protocol.	L2	CO2	6 M
<b>UNIT-III</b>					
6	a)	What is Hidden and Exposed Terminal Problem?	L2	CO3	6 M
	b)	Explain Wireless Routing Protocol.	L2	CO3	6 M
<b>OR</b>					

7	a)	Explain Route establishment and route maintenance in AODV protocol.	L2	CO3	6 M
	b)	Explain Dynamic Source Routing Protocol.	L2	CO3	6 M
<b>UNIT-IV</b>					
8	a)	What are the issues in designing a multicast Routing Protocol?	L2	CO3	6 M
	b)	Explain Multicast tree initialization and maintenance in Multicast Routing Protocol Based on Zone Routing.	L2	CO3	6 M
<b>OR</b>					
9	a)	Explain Multicast tree initialization and maintenance in Bandwidth-Efficient Multicast Routing Protocol.	L2	CO3	6 M
	b)	Explain Mesh Initialization and Mesh Maintenance Phase in mesh-based On-Demand Multicast Routing Protocol.	L2	CO3	6 M
<b>UNIT-V</b>					
10		What are the issues in designing a Transport Layer Protocol For Ad Hoc Wireless Networks?	L2	CO4	12 M
<b>OR</b>					
11		Explain the Issues and Challenges in security Provisioning.	L2	CO4	12 M