

BHAI GURDAS INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Computer Science and Engineering

LESSON PLAN

Subject Name: - Adhoc And Sensors Networks

Subject Code: - BTCS 716-18

Year: -2023

Semester: - 8th

Lecture No.	Unit	Date/ Week	Topic	Teaching Aids	Reference
1	I	1 week	Introduction to Ad Hoc and Sensor Networks and their design challenges	Projector, chalk, green board, duster	Text book , notes
2			Wireless Networks ,issues in Ad Hoc wireless Networks		
3			Routing Protocol for Ad Hoc Wireless Networks,		
4			Classification of Routing Protocols		
5			Table Driven Routing Protocols , Destination Sequenced Distance Vector (DSDV)		
6			On-Demand Routing Protocols		
7			Ad Hoc On-Demand Distance Vector Routing		

			(AODV)		
8	II	9 Days	Issues in Designing A MAC Protocol For Ad Hoc Wireless Networks		
9			Design Goals of MAC protocol for Ad Hoc Wireless Networks		
10			MAC Protocols For Wireless Sensor Networks		
11			Low Duty Cycle Protocols and Wakeup Concepts		
12			Classification of MAC Protocols		
13			Classification of MAC Protocols ,S-MAC		
14			Contention based Protocols- PAMAS , Schedule Based Protocols LEACH		
15			IEEE 802.15.4 MAC Protocols		
16			Energy efficient routing challenges and issues in		

			transport layer		
17	III	6 days	Routing Protocols, Issues in designing a Routing Protocol for Ad hoc Networks		
18			Classification of Routing Protocol- Proactive, Reactive Routing, Hybrid Routing		
19			Transport Layer Protocol for Ad Hoc Networks,		
20			Design Goals of a Transport Layer Protocols for Ad Hoc Wireless Networks		
21			Classification of Transport Layer Solutions		
22			TCP Over Ad Hoc Wireless		
23	IV	6 Days	Challenges For Wireless Sensor Networks		
24			Enabling Technologies For Wireless Sensor Networks		
25			WSN application Examples in		

			Detail		
26			Hardware Components of Single-Node Architecture		
27			Energy Consumption of Sensors Nodes, Sensor Network Scenarios		
28			Transceiver Design Considerations		
29	V	1 Week	Security in Ad Hoc Wireless Networks, Network Security Requirements		
30			Networks Security Requirements issues and Challenges in Security Provisioning Networks		
31			Security Attacks , Layer Wise Attacks in Wireless Sensor Networks		
32			Layer Wise Attacks in Wireless Sensor Networks		
33			Layer Wise Attacks in Wireless Sensor Networks		

34			Possible Solutions for Security Attacks – Flooding attack, tampering black hole attack		
35			SPINS reliability Requirements in Sensor Networks, Sensor Network Platforms and Tools		