Bhoj Reddy Engineering College for Women: Hyderabad

Department of Information Technology

Lesson plan of faculty member for the academic year 2019–20

Class: IV B Tech Branch-Section: IT- A Semester: II

Subject: Adhoc & Sensor Networks Lectures per week: 3

Lecture Number	Topics to be covered	Date (s)
UNIT - I: Introduction to Adhoc Networks		
1	Introduction to Adhoc Networks	23 December 2019
2	Characteristics of MANETs	23 December 2019
3	Applications of MANETs and Challenges	24 December 2019
4	Routing in MANETs, Criteria, and Taxonomy	30 December 2019
5	Topology based, Proactive: DSDV	30 December 2019
6	Reactive: DSR, AODV	31 December 2019
7	Hybrid: ZRP, Position based	06 January 2020
8	Location Services-DREAM	06 January 2020
9	Forwarding Strategies: Greedy Packet	07 January 2020
10	Restricted Directional Flooding-DREAM, LAR	13 January 2020
UNIT - II: Data Transmission		
11	Broadcast Storm Problem, Rebroadcasting	13 January 2020
12	Simple-flooding, Probability-based Methods	20 January 2020
13	Area-based Methods	20 January 2020
14	Neighbor Knowledge based: SBA,	21 January 2020
15	Multipoint Relaying, AHBP	27 January 2020
16	Multicasting: Tree-based: AMRIS, MAODV	27 January 2020
17	Mesh-based: ODMRP, CAMP	28 January 2020
18	Hybrid: AMRoute, MCEDAR	03 February 2020
UNIT - III: Geocasting		
19	Data-transmission Oriented-LBM	03 February 2020
20	Route Creation Oriented-GeoTORA, MGR	04 February 2020
21	TCP over Ad Hoc TCP protocol overview	17 February 2020
22	TCP over Ad Hoc TCP protocol overview	17 February 2020
23	TCP and MANETs	18 February 2020
24	Solutions for TCP over Ad hoc	24 February 2020
UNIT - IV: Basics of Wireless, Sensors and Lower Layer Issues		
25	Applications	24 February 2020
26	Classification of sensor networks	25 February 2020
27	Architecture of sensor network	02 March 2020
28	Physical layer	02 March 2020
29	MAC layer	03 March 2020
30	Link layer	10 March 2020
31	Link layer	16 March 2020
32	Routing Layer	16 March 2020
33	Routing Layer	17 March 2020
UNIT - V: Upper Layer Issues of WSN		
34	Transport layer	23 March 2020
35	High level application layer support	23 March 2020
36	Adapting to the inherent dynamic nature of WSNs	24 March 2020
37	Adapting to the inherent dynamic nature of WSNs	30 March 2020
38	Sensor Networks	30 March 2020
39	Sensor Networks	31 March 2020
40	Mobile Robots	06 April 2020

41	Mobile Robots	06 April 2020
42	Revision	07 April 2020

Text books:

1. Carlos Corderio, Dharma P. Aggarwal, “Ad Hoc and Sensor Networks – Theory and Applications”, World Scientific Publications, ISBN – 981–256–681–3, March 2006.
2. Feng Zhao, Leonidas Guibas, “Wireless Sensor Networks: An Information Processing Approach”, Elsevier Science, ISBN – 978-1-55860-914-3 (Morgan Kauffman).

Name and signature of the faculty: C. Murugamani ----

Name and signature of Head of the Department: M. Vinod ----