

Department Of Computer Science and Engineering

Lesson Plan cum Diary 2015-'16

Name of the Subject : Network Management
Name of the faculty Member : Mr. D. Ganesh
Class & Semester : I M. Tech I semester
Specialization : CNIS

S. No.	Topic	No. of periods required	Date(s) covered	No. of periods used	Book(s) followed	Topics for Self Study
Unit-I: Network Management Overview & Basic Foundations						
1.	Analogy of Telephone Network Management	1			T1	(i) Network Management in Local Area Networks.
2.	Communication Protocols and standards,	2			T1	
3.	case histories of Networking and Management	1			T1	
4.	Network and System Mgmt Network Management functions	2			T1	
5.	Network Management Standards	2			T1	
6.	Network Management Models: Information, Communication, Organizational and Functional	2			T1	
7.	ASN.1, Encoding Structure	1			T1	
Total no of periods required:		11	Total no of periods used:			
Unit-II: SNMPV1 Network Management and Communication Model						
8.	History of SNMP Management	1			T1	(i) Access Simple Gateway Monitoring Protocol (SGMP)
9.	internet organization and standards	2			T1	
10.	SNMP Model: Management Information Base	2			T1	
11.	SNMP Model: Structure of Management Information	2			T1	
12.	Organization and Information models	2			T1	
13.	Communication Model	1			T1	(ii) ICMP Protocol
14.	Functional models in SNMPV1	1			T1	
Total no of periods required:		11	Total no of periods used:			

UNIT III: SNMPV2&SNMPV3 Network Management						
15.	Major changes in SNMPV2	1			T1	(i)SNMP Proxy Server (ii)View-Based Access Control Model View Tree Family
16.	System Architecture and SNMPV2 structure of Management Information	2			T1	
17.	SNMPV2 Management Information Base	1			T1	
18.	SNMPV2 protocol	1			T1	
19.	Key features and SNMPV3 Architecture	1			T1	
20.	Applications of SNMPV3	2			T1	
21.	Management Information Base	1			T1	
22.	User based security model	1			T1	
23.	Access control	1			T1	
Total no of periods required:		11			Total no of periods used:	
UNIT IV: RMON and TMN						
24.	What is Remote monitoring?	2			T2	(i)RMON System Utilities for Management (ii)Enhanced Telecom Operations(eTom)
25.	RMON Structure of Management Information	1			T2	
26.	RMON Management Information Base	1			T2	
27.	Key features of RMON1	1			T2	
28.	Key features of RMON2 and its major changes	1			T2	
29.	ATM Remote monitoring	1			T2	
30.	Case study of RMON with Traffic Management	1			T2	
31.	Why TMN? Operations Systems	1			T2	
32.	TMN conceptual model and its Architecture	1			T2	
33.	TMN integrated view	1			T2	
Total no of periods required:		11			Total no of periods used:	
UNIT V: Broadband and Web-based Management						
34.	Broad band Network and its Services	2			T1	(i)MPLS OAM Management
35.	ATM Technology and its Network Management	2			T1	
36.	MPLS Network Technology	2			T1	(ii)Applications of Web-based
37.	Web Interface to SNMP Management, Embedded Web-based Management	2			T1	

38.	Desktop Management Interface	1			T1	Enterprise Management
39.	Web-based Enterprise Management, Java Management extensions	2			T1	
40.	JIRO platform	1			T1	
Total no of periods required:		12	Total no of periods used:			
Grand total of periods required:		56	Grand total of periods used:			

Text Books:

1. T1: Mani Subramanian, *Network Management: Principles and practice*, Second Edition, Pearson Education, 2011.
2. T2: William Stallings , *SNMP, SNMPV2, SNMPV3, RMON 1 and 2*, Third Edition, Pearson Education, 2009

Reference Books:

1. Stephen B Morris, *Network Management, MIB'S and MPL'S: Principles, Design and Implementation*, Pearson Education 2008
2. Mark Burges, *Principles of Network and System Administration*, Second edition, Wiley Dreamtech, 2008.
3. Louis A Steinberg, *Trouble shooting with SNMP and Analyzing MIB'S*, Tata McGraw Hill, 2006.

Signature of the faculty Member

HOD, CSE