Bhoj Reddy Engineering College for Women: Hyderabad
Department of Information Technology
Lesson plan of faculty member for the academic year 2017–18

Class: IV B Tech Branch-Section: IT-B Semester: II
Subject: Storage Area Networks Lectures per week: 4

Lecture Number	Topics to be covered	Date (s)
UNIT – I: STORAGE FUNDAMENTALS		
1	Introduction to SAN	21 December 2017
2	Review data creation and the amount of data being created	28 December 2017
3	Understand the value of data to a business	22 December 2017
4	Challenges in data storage and data management	23 December 2017
5	Core elements of a data Centre infrastructure	28 December 2017
6	Solutions available for data storage	28 December 2017
7	Role of each element in supporting business activities	29 December 2017
8	Hardware and software components of the host environment	30 December 2017
9	Key protocol and concepts used by each component	4 January 2018
10	Physical and logical components of a disk drive' and their function	4 January 2018
11	Logical constructs of a physical disk	5 January 2018
12	Access characteristics, Performance implications	6 January 2018
UNIT-II: **RAID GROUPS CONCEPTS**		
13	Concept of RAID and its components	11 January 2018
14	Different RAID levels and their suitability for different application environments	11 January 2018
15	RAID 0, RAID 1	12 January 2018
16	RAID 3, RAID 4	13 January 2018
17	RAID 5	18 January 2018
18	RAID 0+1, RAID 1+0	18 January 2018
19	RAID 6	19 January 2018
20	Compare and contra Hi integrated and modular storage systems	20 January 2018
21	High—Level architecture and working of an intelligent storage system Evolution of networked storage	27 January 2018
22	Architecture, components, and topologies of FC-SAN	28 January 2018
23	NAS, and IP SAN	1 February 2018
24	Benefits of the different networked storage options	1 February 2018
25	Understand the need for long-term archiving solutions and describe how CAS fulfills the need	2 February 2018
26	Understand the appropriateness of the different networked storage options for different application environments	3 February 2018
UNIT-III: **Business continuity (BC) and disaster recovery (DR)**		
27	List reasons for planned/unplanned outages and the impact of downtime	10 February 2018
28	Impact of downtime	15 February 2018
29	Differentiate between business continuity (BC) and disaster recovery (DR)	15 February 2018
30	RTO, RPO	16 February 2018
31	Identify single points of failure in a storage infrastructure and	17 February 2018
32	List solutions to mitigate these failures.	22 February 2018
UNIT-IV: **Backup/Recovery topologies**		
33	Architecture of backup/recovery and	22 February 2018
34	The different backup/recovery topologies	23 February 2018
35	Replication technologies	24February 2018
36	Role in ensuring information availability and business continuity	2 March 2018

37	Remote replication technologies role in providing disaster recovery	3 March 2018
38	Remote replication technologies role in business continuity capabilities	8 March 2018
UNIT-V: **Data center monitoring and Management**		
39	Identify key areas to monitor in a data center	8 March 2018
40	Industry standards for data center monitoring and management	9 March 2018
41		10 March 2018
42	Key metrics to monitor for different components in a storage infrastructure	15 March 2018
43	Key management tasks in a data center, Information security	15 March 2018
44	Information security	16 March 2018
45	Critical security attributes for information systems	17 March 2018
46	Storage security domains	22 March 2018
47	List the common threats in each domain Virtualization technologies	22 March 2018
48	Analyzes the common threats in each domain Virtualization technologies	23 March 2018
49	block-level technologies and processes	24 March 2018
50	file-level virtualization technologies and processes	29 March 2018
51	EMC examples	29 March 2018
52	Virtualization technologies examples	31 March 2018

TEXT BOOK

1. EMC Corporation, Information Storage and Management, Wiley.

REFERENCE BOOKS

1. Robert Spalding, “Storage Networks: The Complete Reference”, TataMcGraw Hill, Osborne, 2003.

2. Marc Farley, “Building Storage Networks”, Tata McGraw Hill, Osborne, 2001.

3. Meeta Gupta, Storage Area Network Fundamentals, Pearson Education Limited, 2002.

Name and signature of the faculty: Mrs. M. Sandhya Rani ----

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