

Department of Information Technology

LESSON PLAN

Subject: Big Data Analytics

Subject code: PE-IT-S306A

Session: 2022-23

Semester: VI

S. No	Topic	No. of Lectures required	CO Covered	Teaching Methodology
1	Unit-1 Introduction To Big Data: Introduction – distributed file system	3	CO1	Chalk & Talk
2	Big Data and its importance	2		PPT
3	Four Vs	1		PPT
4	Drivers for Big data	1		PPT
5	Big data analytics	1		PPT
6	Big data applications	1		PPT
7	Algorithms using map reduce	2		Chalk & Talk
8	Matrix-Vector Multiplication by Map Reduce	2		Chalk & Talk
9	Unit-2 Introduction Hadoop: Big Data – Apache Hadoop & HadoopEcoSystem	3	CO2	Chalk & Talk/PPT
10	Moving Data in and out of Hadoop	2		Chalk & Talk/PPT
11	Understanding inputs and outputs of MapReduce	2		Chalk & Talk
12	Data Serialization	2		PPT
13	Unit-3 Hadoop Architecture: Hadoop Architecture	1	CO3	PPT
14	Hadoop Storage: HDFS	1		Chalk & Talk
15	Common Hadoop Shell commands	2		Chalk & Talk/PPT
16	Anatomy of File Write and Read	2		PPT
17	NameNode, Secondary NameNode, and DataNode	1		Chalk & Talk
18	Hadoop MapReduce paradigm	2		Chalk & Talk
19	Map and Reduce tasks	1		Chalk & Talk/PPT
20	Job, Task trackers	1		Chalk & Talk
21	Cluster Setup – SSH & Hadoop Configuration	3		Chalk & Talk/PPT
22	HDFS Administering –Monitoring & Maintenance	2		PPT
23	Unit-4	1	CO4	PPT

	Hadoop Ecosystem And Yarn: Hadoop ecosystem components			
24	Schedulers - Fair and Capacity	1		Chalk & Talk/PPT
25	Hadoop 2.0 New Features- NameNode High Availability	2		Chalk & Talk
26	HDFS Federation	1		Chalk & Talk
27	MRv2	2		Chalk & Talk/PPT
28	YARN, Running MRv1 in YARN	2		Chalk & Talk/PPT