

**Panipat Institute of Engineering & Technology**  
**Department of CSE-AI&DS**  
**LESSON PLAN**

**Subject: Big Data Analytics-BDA**

**Subject code: PC-CS-AIDS- 306A**  
**Semester: 6<sup>th</sup>**

SNo	Topic	CO Covered	Assignment No.	Teaching Methodology
1	<b>UNIT-I</b> Introduction to Big Data	CO1	Assignment-1	PPT
2	Distributed file system	CO1		PPT
3	Big Data and its importance	CO1		PPT
4	Four Vs	CO1		PPT/Video
5	Drivers for Big data	CO1		PPT
6	big data analytics	CO1		PPT
7	big data applications	CO1		PPT
8	Algorithms using map reduce	CO1		PPT
9	Matrix-Vector Multiplication by Map Reduce.	CO1		PPT/Video
10	Matrix-Vector Multiplication by Map Reduce.	CO1		PPT/ Chalkboard
11	<b>UNIT-II</b> Introduction to Hadoop	CO2	Assignment-2	PPT
12	Big Data – Apache Hadoop	CO2		PPT
13	Big Data – Apache Hadoop	CO2		PPT/ Chalkboard
14	Hadoop Eco System	CO2		PPT/Video
15	Hadoop Eco System	CO2		PPT/Video
16	Moving Data in and out of Hadoop	CO2		PPT
17	Moving Data in and out of Hadoop	CO2		PPT
18	Understanding inputs and outputs of MapReduce	CO2		PPT/ Chalkboard
19	Understanding inputs and outputs of MapReduce	CO2		PPT
20	Data Serialization.	CO2		PPT/Video
21	<b>UNIT- III</b> Hadoop Architecture - Hadoop Architecture	CO3	Assignment-3	PPT
22	Hadoop Storage: HDFS	CO3		PPT/Video
23	Common Hadoop Shell commands, Anatomy of File Write and Read	CO3		PPT
24	Name Node, Secondary Name Node, and Data Node	CO3		PPT/ Chalkboard
25	Hadoop MapReduce paradigm	CO3		PPT/Video
26	Map and Reduce tasks, Job, Task trackers - Cluster Setup – SSH	CO3		PPT
27	Map and Reduce tasks, Job, Task trackers - Cluster Setup – SSH	CO3		PPT

28	Hadoop Configuration – HDFS Administering	CO3		PPT/ Chalkboard
29	Hadoop Configuration – HDFS Administering	CO3		PPT
30	Monitoring & Maintenance.	CO3		PPT
31	<b>UNIT-IV</b> Hadoop Ecosystem	CO4	Assignment-4	PPT/ Chalkboard
32	Yarn -Hadoop ecosystem components	CO4		PPT/Video
33	Schedulers - Fair and Capacity	CO4		PPT
34	Hadoop 2.0 New Features	CO4		PPT
35	Name Node High Availability	CO4		PPT/ Chalkboard
36	Name Node High Availability	CO4		PPT
37	HDFS Federation	CO4		PPT
38	MRv2	CO4		PPT/ Chalkboard
39	YARN	CO4		PPT
40	Running MRv1 in YARN	CO4		PPT/ Chalkboard