



# VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

Sponsored by Lavu Educational Society, Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.  
Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002/3



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Phone: +08615 200006/07/08 Email: info@vmtw.in

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD ON COURSE NAME: Hadoop and Spark

### DAY WISE SCHEDULE SHEET

Room No: ATF-5A

DAY	Topic	Timings	Duration
05-03-2018	Introduction to the Hadoop Ecosystem, MapReduce, HDFS, Hive, HBase, and Spark, other modules.	09:00 am to 03:30 pm	6 hrs
06-03-2018	Apache Spark, Functional Programming Basics, Parallel Programming using Resilient Distributed Datasets.	09:00 am to 03:30 pm	6 hrs
07-03-2018	Scale-out / Data Parallelism in Apache Spark, Data Frames and SparkSQL.	09:00 am to 03:30 pm	6 hrs
08-03-2018	Introduction to Data-Frames & SparkSQL, RDDs in Parallel Programming and Spark, Data-frames and Datasets, Catalyst and Tungsten.	09:00 am to 03:30 pm	6 hrs
09-03-2018	Apache Spark architecture, Overview of Apache Spark Cluster Modes	09:00 am to 03:30 pm	6 hrs
10-03-2018	Apache Spark User Interface, Setting Apache Spark Configuration.	09:00 am to 03:30 pm	6 hrs
Total 36 hours			

*Reddy*  
COORDINATOR

*v. Andim*  
HOD

Head of The Department  
Computer Science and Engineering  
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Telangana State



*V. Anu*  
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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### Registration Form

Addon Course Name: Hadoop and Spark

B.Tech IV-II SEM

Branch: CSE

S.No	Roll number	Name of the student	Signature
1.	13UP1A0552	Polapalli Bhavya	Bhavya
2.	14UP1A0501	Banoth Jyothsna	Jyothsna
3.	14UP1A0502	N Saharika	Saharika
4.	14UP1A0503	Pittala Shruthi	Shruthi
5.	14UP1A0504	Pollapalli Shravya Reddy	Shravya
6.	14UP1A0506	Rekula Vani	Vani
7.	14UP1A0507	Siddipeta Jaya	Jaya
8.	14UP1A0508	Singi Reddy Divya	Divya
9.	13UP1A0466	N Vindhya	Vindhya
10.	14UP1A0401	Bukya Mounika	Mounika
11.	14UP1A0402	Gangaramaina Navaneetha	Navaneetha
12.	14UP1A0403	Sepuri Navya	Navya

*Rddy*  
COORDINATOR



*v. Indira*  
HOD

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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### LIST OF REGISTERED STUDENTS

#### ADDON COURSE NAME: HADOOP AND SPARK

B.Tech IV-II Sem,

Branch: CSE

S.No	Roll Number	Name of the Student
1	13UP1A0552	Polapalli Bhavya
2	14UP1A0501	Banoth Jyothsna
3	14UP1A0502	N Saharika
4	14UP1A0503	Pittala Shruthi
5	14UP1A0504	Pollapalli Shravya Reddy
6	14UP1A0506	Rekula Vani
7	14UP1A0507	Siddipeta Jaya
8	14UP1A0508	Singi Reddy Divya
9	13UP1A0466	N Vindhya
10	14UP1A0401	Bukya Mounika
11	14UP1A0402	Gangaramaina Navaneetha
12	14UP1A0403	Sepuri Navya

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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### DAY WISE ATTENDANCE SHEET

ADDON COURSE NAME: Hadoop and Spark

B.Tech IV-II SEM

Branch: CSE

Academic Year: 2017-18

S.No	Roll number	5/3/2018	6/3/2018	7/3/2018	8/3/2018	9/3/2018	10/3/2018
1.	13UP1A0552	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya
2.	14UP1A0501	Jyothsna	Jyothsna	Jyothsna	Jyothsna	Jyothsna	Jyothsna
3.	14UP1A0502	saharika	Absent	saharika	saharika	saharika	saharika
4.	14UP1A0503	shruthi	shruthi	shruthi	shruthi	shruthi	shruthi
5.	14UP1A0504	shravya	shravya	shravya	shravya	shravya	shravya
6.	14UP1A0506	Vani	Vani	Vani	Vani	Vani	Vani
7.	14UP1A0507	Divya	Divya	Absent	Divya	Divya	Divya
8.	14UP1A0508	Divya	Divya	Divya	Divya	Divya	Divya
9.	13UP1A0466	Vindhya	Vindhya	Vindhya	Vindhya	Absent	Vindhya
10.	14UP1A0401	Mounika	Mounika	Mounika	Mounika	Mounika	Mounika
11.	14UP1A0402	Navaneetha	Navaneetha	Navaneetha	Navaneetha	Navaneetha	Navaneetha
12.	14UP1A0403	Navya	Navya	Navya	Navya	Navya	Navya

*Reddy*  
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*n Indira*  
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## Certificate of Course Completion

This is to certify that Ms./Mr. .... **N. SAHARIKA** .....

Roll No. .... **14UPIA0502** ..... Year .... **IV - II** .....

has successfully completed the Addon/Certification Course on

..... **HADOOP AND SPARK** .....

held from ..... **05-03-2018** ..... **10-03-2018** .....

*v. Indir*  
**HoD, CSE**

Head of The Department  
Computer Science and Engineering

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*Budhabera*  
**Principal, VMTW**



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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### Addon course syllabus

#### Addon course: Hadoop and Spark

#### Course objectives:

1. To understand Hadoop Fundamentals
2. To gain understanding Hadoop Distributed File System (HDFS)
3. To gain understanding of the Map Reduce paradigm
4. To gain understanding of the Hadoop ecosystem
5. To gain understanding of the Apache Spark Cluster Models

**Module 1:** Introduction to the Hadoop Ecosystem, MapReduce, HDFS, Hive, HBase, and Spark, other modules.

**Module 2:** Apache Spark, Functional Programming Basics, Parallel Programming using Resilient Distributed Datasets, Scale-out / Data Parallelism in Apache Spark, DataFrames and SparkSQL,

**Module 3:** Introduction to Data-Frames & SparkSQL, RDDs in Parallel Programming and Spark, Data-frames and Datasets, Catalyst and Tungsten.

**Module 4:** Apache Spark architecture, Overview of Apache Spark Cluster Modes, Apache Spark User Interface, Setting Apache Spark Configuration.

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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD ON COURSE NAME: Hadoop and Spark

### ASSESSMENT PROCEDURE

In order to assess the students how effective was the training in helping learners gain relevant knowledge and skills, we conducted the Assessment Test for students after completion of addon course training sessions. The test is conducted in offline mode for 20 marks and evaluated by the trainers. By following grading system the grades are given to the students.

**Note:** Assessment analysis based on grading system.

Grading system				
20-18	17-15	14-10	9-5	4-0
O	A	B	C	Fail

*[Signature]*  
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*[Signature]*  
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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### Add on course Assessment: Hadoop and Spark

Branch & Sections: IV – II CSE  
Academic Year: 2017-18  
Student Name:

Time: 20mins  
Max. Marks: 20  
Roll No:

Answer all the Questions		10 X 2 = 20 Marks					
1	Spark is best suited for _____ data.	[	]				
A	Real-time	B	Virtual	C	Structured	D	All of the above
2	Which of the following Features of Apache Spark?	[	]				
A	Speed	B	Supports multiple languages	C	Advanced Analytics	D	All of the above
3	In how many ways Spark uses Hadoop?	[	]				
A	2	B	3	C	4	D	5
4	When was Apache Spark developed ?	[	]				
A	2007	B	2008	C	2009	D	2010
5	Which of the following is incorrect way for Spark deployment?	[	]				
A	Standalone	B	Hadoop Yarn	C	Spark in MapReduce	D	Spark SQL
6	_____ is a component on top of Spark Core.	[	]				
A	Spark Streaming	B	Spark SQL	C	RDDS	D	None of the above
7	_____ is a distributed graph processing framework on top of Spark.	[	]				
A	MLlib	B	Spark	C	GraphX	D	None of the



  
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				Streaming				above	
8	Point out the correct statement.								[ ]
	A	Spark enables Apache	B	Spark interoperates only with Hadoop	C	Spark is a popular data warehouse	D	All of the above	
9	Which of the following can be used to launch Spark jobs inside MapReduce?								[ ]
	A	SIM	B	SIMR	C	SIR	D	RIS	
10	Which of the following language is not supported by Spark?								[ ]
	A	Python	B	Scala	C	Java	D	Pascal	

**Marks Obtained:**

**Total Marks:**



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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### Add on course Assessment: Hadoop and Spark

#### Answers for the Test

1	2	3	4	5	6	7	8	9	10
A	D	A	C	D	B	C	A	B	D

*Radhika*  
COORDINATOR

*V. Indira*  
HOD

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*V. Anitha*  
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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD ON COURSE NAME: Hadoop and Spark

### ASSESSMENT TEST RESULTS

B.Tech IV-II SEM

Branch: CSE

S.No	Roll number	Name of the student	Grade
1.	13UP1A0552	Polapalli Bhavya	B
2.	14UP1A0501	Banoth Jyothsna	C
3.	14UP1A0502	N Saharika	A
4.	14UP1A0503	Pittala Shruthi	O
5.	14UP1A0504	Pollapalli Shravya Reddy	A
6.	14UP1A0506	Rekula Vani	A
7.	14UP1A0507	Siddipeta Jaya	B
8.	14UP1A0508	Singi Reddy Divya	B
9.	13UP1A0466	N Vindhya	A
10.	14UP1A0401	Bukya Mounika	A
11.	14UP1A0402	Gangaramaina Navaneetha	B
12.	14UP1A0403	Sepuri Navya	O

  
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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### Add on course Assessment: Hadoop and Spark

Branch & Sections: IV - II CSE

Academic Year: 2017-18

Student Name: 14UPIA0504

Time: 20mins

Max. Marks: 20

Roll No:

Answer all the Questions		10 X 2 = 20 Marks						
1	Spark is best suited for _____ data.	[A]						
A	Real-time	B	Virtual	C	Structured	D	All of the above	
2	Which of the following Features of Apache Spark?	[B]						
A	Speed	B	Supports multiple languages	C	Advanced Analytics	D	All of the above	
3	In how many ways Spark uses Hadoop?	[A]						
A	2	B	3	C	4	D	5	
4	When was Apache Spark developed ?	[C]						
A	2007	B	2008	C	2009	D	2010	
5	Which of the following is incorrect way for Spark deployment?	[D]						
A	Standalone	B	Hadoop Yarn	C	Spark in MapReduce	D	Spark SQL	
6	_____ is a component on top of Spark Core.	[B]						
A	Spark Streaming	B	Spark SQL	C	RDDS	D	None of the above	
7	_____ is a distributed graph processing framework on top of Spark.	[C]						
A	MLlib	B	Spark	C	GraphX	D	None of the	



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				Streaming				above	
8	Point out the correct statement.								[A]
	A	Spark enables Apache	B	Spark interoperates only with Hadoop	C	Spark is a popular data warehouse	D	All of the above	
9	Which of the following can be used to launch Spark jobs inside MapReduce?								[A]
	A	SIM	B	SIMR	C	SIR	D	RIS	
10	Which of the following language is not supported by Spark?								[D]
	A	Python	B	Scala	C	Java	D	Pascal	

Marks Obtained: 16

Total Marks: 20

*Deddy*

*RAM*

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