SREENIVASA INSTITUTE OF TECHNOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)
Murukambattu, Chittoor

MCA DEPARTMENT

QUESTION BANK

For

16MCA312 -Big Data Analytics

Regulation – 2018

Academic Year 2018 – 19

Prepared by

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SUBJECT NAME : Big Data Analytics   **SUBJECT CODE : 16MCA312**

YEAR &SEM : III & I   **Academic Year : 2018-19**

UNIT I - Understanding Big Data
Datasets, Data Analysis, Data Analytics-Descriptive Analysis, Diagnostics Analytics, Predictive Analytics, Prescriptive Analytics, Big Data Characteristics – volume, velocity, variety, veracity, value, Different Types of Data – Structured Data, Unstructured Data, Semi-Structured Data

PART -A		
Q.No.	Questions	Blooms Taxonomy Level
1.	Define Dataset	Understanding
2.	Distinguish between Data Analysis and Data Analytics	Analyzing
3.	Mention Different types of Data Analytics	Remembering
4.	Explain Descriptive Analytics with an example	Understanding
5.	Distinguish between Predictive and Prescriptive Analytics	Analyzing
6.	Define Big Data	Understanding
7.	List out the Big Data Characteristics	Remembering
8.	Mention different types of Data	Remembering
9.	Mention some of Big Data Examples	Remembering
PART -B		
1.	Explain Different types of Data Analytics with examples	Understanding
2.	What is BigData and Discuss different characteristics of Big Data	Understanding
3.	Illustrate different types of Data	Applying
4.	Differentiate Descriptive and Diagnostics analytics with example	Analyzing
5.	Differentiate Structured, unstructured and semi structured data in detail	Analyzing
6.	Explain Dataset, Data Analysis and Data analytics in detail	Understanding

UNIT II - Hadoop Basics
Brief history of hadoop, Apache hadoop and the hadoop ecosystem. A weather dataset, analyzing the data with unix tools, analyzing the data with hadoop , Understanding different Hadoop modes, understanding Hadoop Features-Understanding HDFS, Understanding MapReduce, Learning the HDFS and Mapreduce Architecture-Understanding the HDFS architecture, Understanding the MapReduce Architecture, Understanding the HDFS and MapReduce architecture by plot.

PART -A		
1.	What is Hadoop	Understanding
2.	List out various Hadoop ecosystem	Remembering
3.	Mention different Hadoop Modes	Remembering
4.	List out the Hadoop Features	Remembering
5.	Mention two important components of Hadoop	Remembering
6.	What is HDFS	Understanding
7.	What is MapReduce	Understanding
PART -B		
1.	Write about Brief history of Hadoop	Understanding
2.	Explain Apache Hadoop and the Hadoop Ecosystem	Understanding
3.	List and explain various Features of Hadoop	Remembering
4.	Differentiate how to analyze the weather dataset in unix and hadoop	Analyzing
5.	Explain HDFS and Map Reduce in detail	Understanding
6.	Write about HDFS and Map Reduce Architecture	Understanding

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7.	Write about Hadoop History and different Hadoop Modes	Understanding
UNIT III - Writing Hadoop MapReduce Programs		
understanding the basics of MapReduce, Introducing Hadoop MapReduce-Listing Hadoop MapReduce entities, Understanding the Hadoop MapReduce scenario, Understanding the limitations of MapReduce, Writing a Hadoop MapReduce example-Understanding the steps to run a MapReduce job.		
PART – A		
1.	What is Map Reduce	Understanding
2.	Mention Hadoop Map Reduce Entities	Remembering
3.	List out the Map Reduce Limitations	Remembering
4.	List out the steps to run a Map Reduce job	Remembering
5.	Mention major components of Map Reduce	Remembering
6.	Mention various steps in Hadoop MapReduce Scenario	Remembering
7.	List out the companies that use Map Reduce	Remembering
8.	Write about Map Reduce Objects	Understanding
PART – B		
1.	Understand the basics of Map Reduce	Understanding
2.	Explain Hadoop Map Reduce Scenario in detail	Understanding
3.	Explain the steps to run the MapReduce Job	Understanding
4.	Write about the Hadoop Map Reduce Data Processing stages in detail	Understanding
5.	Discuss the Map Reduce Example in detail	Applying
6.	Describe one of the major Component of Hadoop called Map Reduce in detail	Understanding
UNIT IV - Learning Data Analytics		
Understanding the data analytics project life cycle -Identifying the problem, Designing data requirement, Preprocessing data, Performing analytics over data, Visualizing data. **Understanding data analytics problems -** Exploring web pages categorization - Identifying the problem, Designing data requirement, Preprocessing data, Performing analytics over data, Visualizing data.		
PART – A		
1.	List out the Data Analytics project life cycle steps	Remembering
2.	Explain the first step of Data Analytics project life cycle	Understanding
3.	Discuss how to Visualize the Data	Understanding
4.	Mention Data Analytics Problems steps	Remembering
5.	Write about how to identify the problem	Understanding
6.	Discuss about Data Preprocessing	Understanding
7.	List out the steps to discuss Designing data Requirement	Understanding
PART – B		
1.	Explain Data Analytics Project Life cycle steps in detail	Remembering
2.	Briefly Discuss about Data Analytics Problems	Understanding
3.	Discuss how to perform analytics over data	Understanding
4.	Write about any 3 steps of Data Analytics Project Life cycle	Understanding
5.	Briefly Describe how to explore web pages Categorization	Understanding
6.	Explain how to perform analytics and Visualization of data	Understanding
UNIT V - Programming with R		

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Basic Syntax, Data types, Variables, Operators, Decision Making, Loops, Functions, Vectors, lists, Matrices, Arrays, Data Frames, R Data Interfaces – CSV Files, Excel Files, Database, R charts & graphs , R statistics – Mean, Median, Mode, Linear Regression

	PART – A	
1.	What is the Purpose of R	Understanding
2.	Mention R Data Types	Remembering
3.	List out the R Operators	Remembering
4.	What is R List	Understanding
5.	List out R Statistical functions	Understanding
6.	Write the syntax of creating an Array in R	Applying
7.	What is Data Frame	Analyzing
	PART – B	
1.	Write about R Data types, Variables, Operators in detail	Understanding
2.	Illustrate Decision Making Statements in R	Applying
3.	Illustrate Looping statements in R	Applying
4.	Write about R Vectors and R Lists	Understanding
5.	Write about R Data Interfaces	Understanding
6.	Discuss R Charts and R Graphs with example	Understanding
7.	Explain R Statistical Functions in detail	Understanding
8.	Write about R Arrays and R Data frames	Understanding