## Paper / Subject Code: 70721 / Big Data Analytics & Visualization

May 27, 2024 02:30 pm - 05:30 pm 1T00163 - M.C.A. (SEM-III) (Choice Based) (Two Year Course) / 70721 - Big Data Analytics & Visualization QP CODE: 10055924

Time	: 3 Hours] [Total Marks: 80]	j <
N.R:	1) Question No 1 is compulsory.	20
11.13.		70,
		7
	Write a short note on following (any Four)	
(2)	Varn Daemon	(5)
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(f)	DataTypes of Big Data	(5)
		4
(a)	Illustrate the characteristics of social media which make it suitable for Big Data	(10)
	Analytics, S S S S	7 ` ′
(b)	Explain data visualization. List out and Illustrate the various Data	(10)
127	Visualization Tools.	0
		200
(a)		(10)
(b) 0		(10)
(0)		(10)
16	Surday Champto.	
(a)	Discus Matrix Multiplication by MapReduce. Perform Matrix Multiplication	(10)
	with 1-step method	, ,
, (		
4	Matrix A: Matrix B:	
35		
(b)	Illustrate Hive Explain Hive architecture with suitable example	(10)
(0)	indistrate Trive. Explain Trive architecture with suitable example.	(10)
(6)	Eveloin Anacha Smooth What are the advantages of Anacha anguly aven Man	(10)
(a) v		(10)
(b)		(10)
		(10)
(a)	Explain the distributed storage system of Hadoop with the help of a neat	(10)
, C	diagram.	
(1-X)	Tilrestrate the America Waller Erellein with Witchle arrange the streaming of	(10)
(b)	Illustrate the Apache Kafka. Explain with suitable example the streaming of real time data with respect to Apache Kafka.	(10)
	(a) (b) (c) (d) (e) (f) (a) (b) (a) (b) (a)	<ul> <li>(a) Yarn Daemon</li> <li>(b) Visualization using Bar Chart</li> <li>(c) Dataset Vs DataFrames</li> <li>(d) Joins in Hive</li> <li>(e) HDFS Vs HBase</li> <li>(f) DataTypes of Big Data</li> <li>(a) Illustrate the characteristics of social media which make it suitable for Big Data Analytics.</li> <li>(b) Explain data visualization. List out and Illustrate the various Data Visualization Tools.</li> <li>(a) Explain the significance of Pig in Hadoop Ecosystem. Explain the Data Model in Pig Latin with suitable example.</li> <li>(b) Explain the CAP Theorem and NoSQL Data architectural pattern with suitable example.</li> <li>(a) Discus Matrix Multiplication by MapReduce. Perform Matrix Multiplication with 1-step method</li> <li>Matrix A:  Matrix B:  1 2 5 6 3 4 2 3</li> <li>(b) Illustrate Hive. Explain Hive architecture with suitable example.</li> <li>(a) Explain Apache Spark. What are the advantages of Apache spark over Map Reduce.</li> <li>(b) Illustrate NoSQL data architecture patterns with suitable example.</li> <li>(a) Explain the distributed storage system of Hadoop with the help of a neat diagram.</li> </ul>