

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

M.TECH I Year II Semester (R16) Regular Examinations May/June 2017

DATA ANALYTICS (16CS5812)

Unit – I

1. Write about Big data challenges and issues 10M
2. a)What is Big Data? Define Characteristics of Big Data? 5M
b)Discuss about BASE? 5M
3. Explain about Open Source Analytics Tools? 5M
4. a)Discuss about the three dimensions of Big Data 5M
b)Illustrate on how Cloud and Big Data related to each other. 5M
5. a)Write at least four Big Data Analytics Applications in detail. 5M
b)Define the drivers for Big Data-Velocity, Variety, and Veracity. 5M
6. Write about Terminologies used in Big Data Environment? 5M
7. a)Discuss about the three Big data Applications. 5M
b) Illustrate on how Cloud and Big Data related to each other. 5M
8. Explain about Basically Available Soft State Eventually consistent? 10M
9. What is Big Data and Big Data Analytics? Illustrate on how Cloud and Big Data related to each other. 10M
10. Write about Terminologies used in Big Data Environment? 5M

Unit-II

1. What are the main difference between reporting and analysis? 10M
2. Explain the analytics and what are the various types involve in the analytics?10M
3. Explain the various points to consider during the analytics in big data? 10M
4. What are the important roles playing in developing an analytic team? 10M
5. Brief notes about Text Analytics with Use Cases? 10M
6. What are the tools involve in analytical approaches for analysedata? 10M
7. What are ways in Analytical Approaches? Write? 10M
8. Write Brief Notes on History of Analytical Tools? 10M
9. Explain the Popular Analytics Tools in Big Data? Write Brief Notes on any Two?10M
10. Comparing the any Two Analytical Tools? Explain with Neat? 10M

Unit-III

1. Write Hadoop Eco system components with neat diagram? 10M

2. a) Explain about hdfs architecture? With neat diagram? 5M
 b) Explain what is JobTracker in Hadoop? What are the actions followed by Hadoop? 5M
3. a) Describe the operations of "shuffle" and "sort" in the Map reduce framework. Explain with the help of one example. 5M
 b) Illustrate a simple example of the working of MapReduce. 5M
4. Explain in detail how hive is different from PIG? 10M
5. a) What are the key differences between Pig vs Map Reduce? 5M
 b) Big data Testing Vs. Traditional database Testing 5M
6. Show Map Reduce implementation for the following two tasks using pseudocode.
 i) join of two relations with an example 10M
 ii) Multiplication of two matrices with one Map reduce step.
7. a) In Map-Reduce Implementation of Word count, Write Types of keys and Values mapper, reducer, combiner(if any) and which of the types need to Writable. 10M
8. a) What are the different modes in which Hadoop can be installed and what is the use of each mode from application and developer point 5M
 b) Explain the uses of Name node, Data node and Secondary Name node in Hadoop Distributed File system. 5M
9. a) Explain hadoop distributed file System architecture? 5M
 b) Explain about hdfs operations? 5M
10. Write Short Notes on: 10M
 i) Job Tracker
 ii) Task Tracker
 iii) Name Node
 iv) Data Node

Unit-IV

1. What are the different data architecture patterns in NOSQL? Explain "Graph Store" and "Column Family Store" patterns with relevant examples. 10M
2. Write about Hadoop use cases and Case Studies? 10M
3. a) What is HBase? Write Difference Between HBase and HDFS? 5M
 b) Explain Storage Mechanism in HBase? 5M
4. Explain about Five Hadoop Daemons? 10M
5. a) Explain about Difference between Hadoop 1.0 and Hadoop 2.0? 5M
 b) What is NoSQL? Compare NoSQL & RDBMS? 5M
6. a) What is Not Only SQL? What are the features of NoSQL? 5M
 b) What are the real-time industry applications of Hadoop? 5M
7. Explain Hadoop Hive data types with examples? 10M
8. Explain the Real Time Hadoop Applications? With Neat? 10M

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| 9. a) Explain Name Node and Data Node | 5M |
| b) Explain Job Tracker and Task Tracker? | 5M |
| 10. a) Compare Between Non SQL and Relational Database? | 5M |
| b) Explain functionalities of Hadoop 2.0 | 5M |

Unit – V

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| 1. a) What is Social Media? What are the pro and cons of Social Media? | 5M |
| b) Explain the various key elements in the Social Media? | 5M |
| 2. What is Text Mining? How to understand the Text Mining Process? | 10M |
| 3. Write the Short Notes on: | 10M |
| a) Sentiment Analysis | |
| b) Opinion Mining | |
| 4. a) Explain the Major Role Participating in Performing Social Media Analytics? | 5M |
| b) How to Calculate the Opinion Mining on Tweets? | 5M |
| 5. Explain Popular Mobile analytical Tools? Explain any two? | 10M |
| 6. Compare between Mobile and Web Analytics? | 10M |
| 7. Write brief notes on Mobile Analytics? | 10M |
| 8. Explain the Different types of Applications for the Mobile Analytics? | 10M |
| 9. a) Explain the types of results from Mobile Analytics? | 5M |
| b) Types of applications from Mobile Analytics? | 5M |
| 10. a) Explain the difference Website Home Page and Landing Page? | 5M |
| b) Why mobile applications are most popular? Explain? | 5M |