

Reg. No. :

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**Question Paper Code: 95R04**

Ph.D. COURSE WORK EXAMINATION, NOV 2019

Elective

Computer Science and Engineering

19PCS504 - BIG DATA ANALYTICS

(Regulation 2019)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART - A (10 x 2 = 20 Marks)

- |     |  |        |     |
|-----|--|--------|-----|
| 1.  | Define Fraud.                                      | CO1- U | (2) |
| 2.  | What are the industry applications of big data?    | CO1- U | (2) |
| 3.  | Define key-value storage.                          | CO2- U | (2) |
| 4.  | What is Schema-less database?                      | CO2- U | (2) |
| 5.  | How mapReduce phase works in hadoop data analysis? | CO3- U | (2) |
| 6.  | What are the benefits of block?                    | CO3- U | (2) |
| 7.  | What are the steps in testing the mappers?         | CO4- U | (2) |
| 8.  | List the types of job scheduler.                   | CO4- U | (2) |
| 9.  | Write a note on the use of Zookeeper?              | CO5- U | (2) |
| 10. | List any four complex data types of Pig.           | CO5- U | (2) |

PART - B (5 x 16 = 80 Marks)

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|-----|---|--------|------|
| 11. | (a) Discuss Industry Examples of Big data in detail   | CO1- U | (16) |
|     | Or  |        |      |
|     | (b) Explain Near Real time event processing frame work for fraud detection with the help of neat diagram? | CO1- U | (16) |
| 12. | (a) Discuss briefly about key-value and document data model.  | CO2- U | (16) |
|     | Or  |        |      |
|     | (b) Discuss Master slave and peer-peer replication in in detail.  | CO2- U | (16) |

13. (a) Discuss serialization in detail. CO3- U (16)
- Or
- (b) Discuss Avro in detail. CO3- U (16)
14. (a) Discuss Map reduce job scheduling in detail with neat diagram. CO4- U (16)
- Or
- (b) Discuss YARN (Mapreduce 2) in detail with failures in classic Map-reduce. CO4- U (16)
15. (a) Explain Pig data Model in detail and Discuss how it will help for effective data flow. CO5- U (16)
- Or
- (b) Explain Cassandra data model in detail and discuss how it will help for effective data flow. CO5- U (16)