ℬℬⅅ℧ School of Computer Applications Roll No. **BCADS Second Sessional Tests 2023-24** Fourth Semester BCADS1401: Big Data Fundamentals Max. Marks: 60 (Section A) Time: 3 Hours (1*8)Q1. Attempt All Questions a) What is YARN's Primary function in Hadoop? b) List down the 5 V's of Big Data c) What is the purpose of mapper in Map Reduce? d) What is the default block size and replication count in Hadoop? e) Define the use of Ls, cat, gedit, and touch commands? Write down the list of libraries of apache spark g) Explain the benefits of using sqoop in Hadoop What are the 4 different forms of data in NoSQL databases? Section B (6*2)a) List the segments of HDP and also name 2 components from each Q2. Attempt any Two. b) What is big data, what are its scope and challenges?

c) Explain the architecture of HBASE in detail

Explain the working of 5 components of hdfs and mapreduce in (5*2)Hadoop

Q3 Attempt Any Two.

- a) List down the differences between sql and NoSQL
- b) Discuss the working and benefits of Horizontal scaling

c) Explain the use of ambari in Hadoop

(5*2)Q4 Attempt Any Two.

- a) List and explain different types of analysis with examples
- b) Write down the procedure of static and dynamic partitioning In HIVE
- c) Explain the architecture of hive with neat diagram and also Explain Its use cases

Q5 Attempt Any Two.

- a) Describe the use of zookeeper and IBM fluid query in HDP
- b) Why is PIG used in Hadoop, explain the components of PIG
- © Describe the Pillars of security in the big data ecosystem

Q6 Attempt Any Two

- a) What is Map Reduce, explain its working with example of Word count diagram
- b) Describe Apache Spark and its working in brief
- c) How is YARN helping the growth of Hadoop?