

M.Sc.(IT & CA) Semester - 2 (CBCS) Examination
April/May-2023 (NEW COURSE)
INTRODUCTION TO BIG DATA AND HADOOP(CORE)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
 2. Figures to the right indicate marks.
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- Q.1(A) Answer the following questions. (03)**
- 1) What is Virtual Box?
 - 2) Hadoop Written in _____.
 - 3) Full form of CRC.
- Q.1(B) Answer the following question. (Any Two) (06)**
- 1) What is Big Data? And Explain types of Big Data.
 - 2) Difference between Windows and Linux.
 - 3) What is Hadoop? Explain advantages of Hadoop.
- Q.1(C) Answer the following question. (Any One) (05)**
- 1) Explain CRC and Check Sum with examples.
 - 2) Explain HDFS Architecture in details.
- Q.2(A) Answer the following questions. (03)**
- 1) YARN stands for ____.
 - 2) A bag is collection of ____.
 - 3) Apache Pig, have a Java repository called _____.
- Q.2(B) Answer the following question. (Any Two) (06)**
- 1) What is Map-Reduce? Explain with example.
 - 2) Explain hadoop schedulers with example.
 - 3) What is Apache Pig? Explain features of pig.
- Q.2(C) Answer the following question. (Any one) (05)**
- 1) Explain Architecture of Pig.
 - 2) Explain Diagnostic operators in details.
- Q.3(A) Answer the following questions. (03)**
- 1) Full form of DML.
 - 2) Full form of UDTF.
 - 3) Managed table is also called as _____.
- Q.3(B) Answer the following question. (Any Two) (06)**
- 1) What is Hive?
 - 2) Explain Hive DDL and DML commands.
 - 3) Explain Managed and External tables in Hive.
- Q.3(C) Answer the following question. (Any One) (05)**
- 1) Explain Optimization Techniques in details.
 - 2) Explain Architecture of Hive.

- Q.4(A) **Answer the following questions.** (03)
- 1) What is HBase?
 - 2) HBase is a _____ Database.
 - 3) Full form of OLAP.
- Q.4(B) **Answer the following question. (Any Two)]** (06)
- 1) What is HBase Compaction?
 - 2) Explain Root and Meta Tables in HBase.
 - 3) Difference between HDFS and HBase.
- Q.4(C) **Answer the following question. (Any One)** (05)
- 1) Explain HBase Architecture.
 - 2) Explain HBase Filtering in details.
- Q.5(A) **Answer the following questions.** (03)
- 1) Full form of RDD
 - 2) Full form of SSH.
 - 3) Full form of DAG.
- Q.5(B) **Answer the following question. (Any Two)** (06)
- 1) What is Apache Spark? Explain features of Spark.
 - 2) What is Amazon EC2?
 - 3) What is Sqoop? And How Sqoop works?
- Q.5(C) **Answer the following question. (Any One)** (05)
- 1) Explain Apache Flume and Oozie in details.
 - 2) Explain Spark Architecture.
