

M.Sc.(IT & CA) Semester - 2 (CBCS) Examination
March/April – 2025 (As Per Syllabus Year-2018)
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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- Que.1(A) Answer the following questions. [03]
1) Full form of HDFS.
2) Full form of CRC.
3) Full form of CAP.
- Que.1(B) Answer the following question. (Any Two) [06]
1) What is Big Data? And Describe Sources of Big Data.
2) Explain Features of HDFS.
3) Explain data Read and Write operation in Hadoop hdfs.
- Que.1(C) Answer the following question. (Any One) [05]
1) Explain Hadoop Architecture.
2) Explain HDFS Federation in details.
- Que.2(A) Answer the following questions. [03]
1) DHSA stands for _____.
2) Full form of YARN.
3) Full form of BSP.
- Que.2(B) Answer the following question. (Any Two) [06]
1) Explain Map-Reduce with example.
2) Explain Pig LOAD operator with example.
3) Explain Shuffling and Sorting in Map-Reduce.
- Que.2(C) Answer the following question. (Any one) [05]
1) Explain Architecture of Pig.
2) Describe Map-Reduce Architecture.
- Que.3(A) Answer the following questions. [03]
1) Full form of DDL.
2) Hive developed by _____.
3) By default, Hive uses a built-in _____ SQL server.
- Que.3(B) Answer the following question. (Any Two) [06]
1) What is Hive?
2) Difference between Old and New MR API.
3) What is Avro?
- Que.3(C) Answer the following question. (Any One) [05]
1) Explain Architecture of Hive.
2) Explain MR Algorithms.
- Que.4(A) Answer the following questions. [03]
1) Table is a collection of _____.
2) HBase is a _____ Database.
3) _____ is the default Port of Rest API.
- Que.4(B) Answer the following question. (Any Two) [06]
1) What is HBase?
2) Explain Catalog Tables in HBase.
3) Difference between HBase and RDBMS.

- Que.4(C) Answer the following question. (Any One) [05]
1) Explain HBase Coprocessors.
2) Explain HBase Architecture.
- Que.5(A) Answer the following questions. [03]
1) Full form of RDD is _____.
2) Full form of EMR.
3) Sqoop is an open-source tool written at _____.
- Que.5(B) Answer the following question. (Any Two) [06]
1) What is Apache Spark?
2) Describe: Flume and Oozie.
3) Explain Graph processing with Neo4J.
- Que.5(C) Answer the following question. (Any One) [05]
1) What is Sqoop? And How Sqoop works?
2) Explain Spark Architecture.
