

Time : 3 Hours

Total Marks: 80

- N.B. :** 1) Question No.1 is **compulsory**.
 2) Attempt any **three** from the remaining **five** questions.
 3) Figures to the right indicate full marks

- Q1. Explain in brief
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|---|---|
| (a) BASE properties of NoSQL databases. | 5 |
| (b) 3 Vs of Big data. | 5 |
| (c) HDFS Federation | 5 |
| (d) Hive SerDe | 5 |
- Q2. (a) Illustrate the main components of HDFS with the diagram. 10
 (b) Compare HBASE with conventional RDBMS. 10
- Q3. (a) Explain the Hadoop ecosystem with the diagram. Elaborate any three components of Hadoop Ecosystem? 10
 (b) What to you mean by InputFormat ? What is the role of RecordReader in Hadoop MapReduce? 10
- Q4. (a) List the types of NoSQL databases with an example of each. 10
 (b) What is HIVE? Explain HIVE architecture in detail. 10
- Q5. (a) How Relational Algebra operations are executed using MapReduce ? 10
 (b) What is Pig ? Discuss the Load() & Store() commands in Pig framework. 10
- Q6. Write short notes on **any four** of the followings 20
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|---------------------------|--|
| (a) HBASE data models | |
| (b) Speculative Execution | |
| (c) YARN | |
| (d) HDFS Commands | |
| (e) Pig Latin | |
