

BIG DATA TECHNOLOGIES

(Common to CSE & IT)

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Differentiate between structured and unstructured data.
 - (b) What are the four characteristics of big data?
 - (c) What are the core methods of a reducer?
 - (d) Differentiate between HBase and Hive.
 - (e) Define data locality.
 - (f) Explain Hadoop streaming.
 - (g) Enumerate the objectives of fair scheduler.
 - (h) Which interface needs to be implemented to create mapper and reducer for Hadoop?
 - (i) Define Metastore in Hive.
 - (j) Mention the key components of H Base.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT - I

- 2 (a) Define the drivers for big data velocity, variety, and veracity.
(b) Write four big data analytics applications in detail.

OR

- 3 (a) Explain Hadoop framework in detail.
(b) Explain Hadoop installation process in detail.

UNIT - II

- 4 Explain the HDFS architecture in detail.

OR

- 5 Explain the following:
(a) Coherency model.
(b) Distcp.

UNIT - III

- 6 Explain how Hadoop analyze data with an example code.

OR

- 7 Explain the functionalities of MapReduce web UI in detail.

UNIT - IV

- 8 Explain the objectives of map reduce. Describe the anatomy of map reduce job run in detail.

OR

- 9 Discuss different types of input and output formats of map reduce with an example.

UNIT - V

- 10 Describe the architectural differences of Hive in comparison with traditional databases.

OR

- 11 Explain how map reduce can be used with HBase for a big data application with appropriate code segments.
