

**INTRODUCTION TO BIG DATA**

(Common to CSE & IT)

Time: 3 hours

Max. Marks: 70

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Define cloud computing.
  - (b) What is socket? Explain.
  - (c) Write note about limitations of HAR files.
  - (d) What are namenodes?
  - (e) What is the role of combiner and partitioner in map reduce application?
  - (f) Write note mapper.
  - (g) What is the function of logs in map reduce jobs?
  - (h) What is a Daemon thread?
  - (i) List some big data analytics libraries in Apache Mahout.
  - (j) Define clustering.

**PART – B**

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

**UNIT – I**

- 2 Explain in detail about thread and its role in cloud computing.

**OR**

- 3 Describe the concept and architecture of cloud computing.

**UNIT – II**

- 4 Elucidate the internals of Hadoop distributed files system (HDFS).

**OR**

- 5 Discuss the goals of HDFS and explain the concept of Hadoop architecture.

**UNIT – III**

- 6 (a) Elaborate the design issues of setting up cluster in HDLC.  
(b) Discuss the functionalities of YARN.

**OR**

- 7 I Discuss the process of map and reduce part of MapReduce framework with an example.

**UNIT – IV**

- 8 List and explain briefly the different logs produced by map reduce.

**OR**

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

**UNIT – V**

- 10 Discuss how Mahout libraries can be used for big data analytics with example.

**OR**

- 11 Elucidate the concept of K-means clustering with an example.

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