Code: CS7T1

IV B.Tech - I Semester - Regular Examinations - October - 2017

BIG DATA CONCEPTS (COMPUTER SCIENCE & ENGINEERING)

Duration: 3 hours Max. Marks: 70

PART - A

Answer all the questions. All questions carry equal marks

 $11 \times 2 = 22$

1.

- a) Compare RDBMS with MapReduce approach?
- b) What is Grid Computing?
- c) State the necessity of MapReduce approach.
- d) Define HDFS.
- e) Classify the different Data ingesting methods in HDFS.
- f) Draw the Transition diagram of an Oozie workflow.
- g) What is GenericOptionsParser class?
- h) Name the four independent entities in classic MapReduce of a job run.
- i) How the Capacity Scheduler approach differs with Fair Scheduler?
- j) Write the advantage of Lazy output.
- k) What is the use of MultipleOutputs?

PART - B

Answer any *THREE* questions. All questions carry equal marks. $3 \times 16 = 48 \text{ M}$

- 2. a) Write & explain the classes in Java MapReduce API. 8 M
 - b) Describe MapReduce dataflow with Multiple reduce tasks. 8 M
- 3. a) Explain Hadoop File system in detail. 10 M
 - b) How to Read and Write the data into/from HDFS using Java API, explain with an example.

 6 M
- 4. a) What is the use of MR unit? Explain MR unit test approach in MapReduce application. 8 M
 - b) Explain different properties of Configuration class. 8 M
- 5. a) With a neat sketch explain how Hadoop runs a job using a Classic MapReduce.8 M
 - b) Explain the Task Execution of a job in the MapReduce System. 8 M

- 6. a) Write the OutputFormat class hierarchy in Hadoop. 8 M
 - b) Explain MapReduce types in Hadoop? 8 M