

M.C.A. - II (2 Years) New CBCS Pattern Semester-III  
**PMCAT303 - Paper-III : Big Data & Hadoop**

P. Pages : 2

Time : Three Hours



**GUG/W/23/13649**

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagrams wherever necessary.
  3. Avoid vague answer and write answers relevant and specific to questions only.

**Either:**

1. a) Explain in detail data serialization. **8**  
b) What is MapReduce? Explain with example. **8**

**OR**

- c) Explain V's of Big data? **8**  
d) Explain details of Hadoop Ecosystem. **8**

**Either:**

2. a) Write about SSH & Hadoop configuration. **8**  
b) Define MapReduce? Explain the implementation of a MapReduce with suitable example. **8**

**OR**

- c) Explain hadoop storage in big data in detail. **8**  
d) Explain the anatomy of file read and write in Hadoop. **8**

**Either:**

3. a) Explain in detail- **8**  
i) Fair scheduler  
ii) Capacity scheduler  
b) Explain monitoring and maintenance in HDFS Administration. **8**

**OR**

- c) Explain detail on Hadoop 2.0. **8**  
d) What is MRv2 and YARN? Explain in detail. **8**

**Either:**

4. a) How the schema design is done in HBase? Explain in detail. **8**
- b) What is ZooKeeper and how it help in monitoring a cluster. **8**

**OR**

- c) Write short note on HBASE in detail. **8**
- d) Explain in detail about the different types of joins in Hive. **8**
5. Attempt **all** the questions.
- a) Explain different Applications in Big data. **4**
- b) Explain Task trackers in detail. **4**
- c) Write short note on HiveQL. **4**
- d) Explain with example on MapReduce script. **4**

\*\*\*\*\*