

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

P. Pages : 2

Time : Three Hours



**GUG/S/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 answers and write answers relevant and specific to questions only.

**Either:**

1. a) What is distributed File System? Explain the significance of Four V's in Big data. **8**  
b) Explain in brief about Big Data Analysis? **8**

**OR**

- c) What is Big Data? Explain Characteristics of Apache Hadoop? **8**  
d) Explain Map Reduce concept and all building blocks of Hadoop. **8**

**Either:**

2. a) Explain Hadoop Shell Command in detail? **8**  
b) Write about SSH & Hadoop Configuration. **8**

**OR**

- c) Explain in brief about Hadoop Architecture? **8**  
d) Define Map Reduce? Explain the implementation of a map reduce with suitable example. **8**

**Either:**

3. a) Explain in detail. **8**  
i) MRv2  
ii) YARN.  
b) What are the New Features of Hadoop 2.0? Explain? **8**

**OR**

- c) Explain the concept of HDFS? **8**  
d) What are the components of Hadoop ecosystem? Explain. **8**

**Either:**

4. a) Explain Sorting and Aggregating in HiveQL? **8**  
b) How the Schema Design is done in HBase? Explain in detail. **8**

**OR**

- c) What is Zookeeper and how it helps in monitoring a Cluster? **8**  
d) Write a short note on PIG? **8**
5. Attempt **all** the questions.
- a) Explain Data serialization? **4**  
b) Write a short note on Name Node and Data Node? **4**  
c) Write about Schedulers in Hadoop. **4**  
d) How to Build Applications with Zookeeper? **4**

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