

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:

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

OR

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|-----------|----|---|----------|
| | 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 |
