



Sanjay Ghodawat University, Kolhapur

2017-18

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

FY M Tech

CCC 510.3

MAY 2018

30th May 2018

School of Technology | Department of CS Engineering

Data Science & Big Data Analytics

End Semester Examination (ESE)

Semester II

Max Marks: 100

Time: 3 Hrs

10:30 AM to 1:30 PM

Instruction for Students: All questions are compulsory.

| | | Marks | COs |
|-----------|----------------------------------------------------------------------------------------------------|-------|-----|
| Q1 | Solve any Two | 09 | 2 |
| a) | What is mean by data science? Explain the role and responsibilities of data scientist in industry? | 09 | 5 |
| b) | Explain the concept of Tunable Consistency in Cassandra | 09 | 4 |
| c) | Explain what is a replica set? | | |
| Q2 | a) How does Map-Reduce work? | 09 | 3 |
| | b) Draw and explain the YARN architecture? | 09 | 3 |
| | OR | | |
| | b) Elaborate Hadoop Ecosystem in detail. | 09 | 3 |
| Q3 | a) Explain the concept of compaction in Cassandra | 07 | 5 |
| | b) Explain the CAP theorem | 07 | 5 |
| Q4 | Solve any Two | Marks | COs |
| a) | How is traditional BI environment different from the big data environment? | 09 | 1 |
| b) | What is the difference between HBase and Hive? | 09 | 6 |
| c) | How replication works in MongoDB? | 09 | 4 |
| Q5 | a) What is big data? Explain typical data warehouse and hadoop environment. | 09 | 1 |
| | b) What is sharding in MongoDB? | 09 | 4 |
| | OR | | |
| | b) While creating schema in MongoDB what are the points need to be taken in consideration? | 09 | 5 |
| Q6 | a) State and explain the classification of analytics | 07 | 2 |
| | b) Explain about the different types of partitioning in Hive? | 07 | 6 |
