

Question Paper

Exam Date & Time: 18-Apr-2018 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

SCHOOL OF INFORMATION SCIENCES (SOIS) SECOND SEMESTER ME -(BIG DATA AND DATA ANALYTICS) DEGREE EXAMINATION- APRIL/MAY 2018

Wednesday, April 18, 2018

Time : 10.00 am to 1.00 pm

Architecture of Big Data Systems [BDA 604]

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Write a short note on batch layer of lambda architecture. (10)
What are the DB requirements to build the batch layer?
- 2) Write short note on: (10)
 - a. Predictive analytics
 - b. Prescriptive analytics
- 3) Compare synchronous with asynchronous updates in speed (10)
layer.
- 4) Comment on Resilient distributed Datasets. (10)
- 5) List 5 Alternatives for Map Reduce. Explain how each of (10)
them differs from traditional Map Reduce.
- 6) How pipe diagrams are much more concise and natural (10)
way to think about batch computation. Explain with
example.
- 7) List and explain the desired properties of a big data (10)
system.
- 8) What are the parameters those effect the performance of (10)
the serving layer of an application. Explain with example.
- 9) Suppose you are building an application named (10)
"analytics.com". The application queries:
 - a. Page views over time
 - b. Unique visitors overtime
 - c. Bounce rate analysis

List the requirements to build a serving layer DB for the

above application.

- 10) How distributed file systems meet the storage requirement? (10)

-----End-----