

Question Paper



MANIPAL UNIVERSITY

SCHOOL OF INFORMATION SCIENCES SECOND SEMESTER Master of Engineering- ME (Big Data and Data Analytics)

DEGREE EXAMINATION- NOVEMBER 2017

DATE : Thursday, November 16, 2017

Time : 10:00AM - 1:00PM

Architecture of Big Data Systems [BDA 604]

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) List and explain the analysis types. What is the difference between Analytics and Reporting? (10)
- 2) What were the drawbacks in existing data storage mechanisms that lead to the development of druid? (10)
- 3) Write a short note on Resilient Datasets. Compare RDDs with Distributed Shared memory. (10)
- 4) Comment on Resilient distributed Datasets. (10)
- 5) Explain the working of hadoop system. (10)
- 6) Let's design a big social network called "Stay Connected". When a new user joins, he starts to invite his friends and family and consequently his circle increases. Your job is to maintain the Friend list of the user. What would be the properties of the data you need to deal with? (10)
- 7) Write a short note on Cassandra. (10)
- 8) What are the parameters those effect the performance of the serving layer of an application. Explain with example. (10)
- 9) Suppose you are building an application named "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)
- 10) Write a short note on summing bird. Mention the additional features added in summing bird over map reduce. (10)

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