# **Question Paper**

Exam Date & Time: 20-Nov-2018 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

SCHOOL OF INFORMATION SCIENCES

SECOND SEMESTER MASTER OF ENGINEERING - ME (BIG DATA AND DATA ANALYTICS)

#### Architecture of Big Data Systems [BDA 604]

Marks: 100

Duration: 180 mins.

(10)

### **DEGREE EXAMINATION NOVEMBER 2018**

#### Answer all the questions.

<sup>1)</sup> Write short note on:	
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- 1. Descriptive analytics
- 2. Prescriptive analytics

2)	Although Map-Reduce is a paradigm in computing batch views, Sometimes working with Map Reduce is tedious and limiting. How?	(10)
3)	Write a short note on Druid Data storage.	(10)
4)	List 5 Alternatives for Map Reduce. Explain how each of them differs from traditional Map Reduce.	(10)
5)	List the data storage requirements of speed layer. Comment on Asynchronous and synchronous updates.	(10)
6)	Differentiate between Incremental and Recomputational algorithms.	(10)
7)	Write a short note on Elephant DB and how does it meet the storage requirements of Serving Layer in Lambda Architecture.	(10)
8)	List the points, a software engineer, needs to consider while choosing a storage solution for batch layer. How does distributed File system work?	(10)
9)	Comment on Resilient distributed Datasets.	(10)
10)	List the problems faced earlier while storing Big Data in traditional DBs that lead to the development of Big data	(10)

Technologies.

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