

# Question Paper

Exam Date & Time: 25-Apr-2018 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

### SCHOOL OF INFORMATION SCIENCES (SOIS) SECOND SEMESTER MASTER OF ENGINEERING- ME (COMPUTING TECHNOLOGIES AND VIRTUALIZATION) DEGREE EXAMINATION-APRIL 2018

Wednesday, April 25, 2018

Time: 10:00am to 1:00pm

### Big Data and Data Visualization [VIR 620]

Marks: 100

Duration: 180 mins.

#### Answer all the questions.

- 1) What are the various sources of Big Data? What are the considerations made in choosing appropriate and useful data? (4+6 Marks) (10)
- 2) Explain the Big Data Platform in a holistic approach with an example. (10)
- 3) Explain these terms with an example with respect to Statistics. (2.5 x 4 Marks) (10)  
**a.** Variance      **b.** Range      **c.** Percentile  
**d.** Quartile
- 4) List the frequently used classes for the key/value pair with its description in MapReduce. Explain Mapper and Reducer function. (4+6 Marks) (10)
- 5) Write a note on the Admin API in HBase with various Methods and Description. (10)
- 6) Briefly mention the features and uses of HBase? Compare the features of HBase with that of RDBMS. (5+5 Marks) (10)
- 7) What is Hive? Describe the working of Hive with a neat workflow. (2+8 Marks) (10)
- 8) What is Supervised and Unsupervised learning with respect to Machine Learning? Explain. (10)
- 9) Explain the importance of using a Line Graph and Scatter Plot in Data Visualization with an example. (10)
- 10) What is Predictive Analytics? Explain the process flow of Text Analytics and its applications. (2+8 Marks) (10)

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