

19IT601 – Data Science and Analytics

PART A

1. Define Data Science.
2. List out the characteristics of big data
3. What is Prescriptive Analytics?
4. Differentiate discrete and continuous data and give example for each.
5. What is binomial distribution?
6. Define big data analytics?
7. Mention the types of digital data with example
8. Write the importance of big data analytics
9. What is probability density function?
10. How useful is measure of Covariance and Correlation in data analytics?

PART B

1. I)Write in detail the phases of data science life cycle
II)Enumerate the skills required and the roles of the data scientist.
2. Illustrate with example the classification of digital data
3. Explain the major challenges of handling big data.
4. Discuss the different types of data with suitable example.
5. Brief out various terminologies used in big data environment
6. Elaborate the history and evolution of big data.
7. Describe the characteristics data with suitable example.
8. Illustrate various categories of data distribution.

PART C

1. Analyze the various classifications of analytics and compare the real time application use cases of each.
2. Narrate the importance of percentiles and moments in data analytics and also justify how they helpful in identifying similarities in data sets.
3. Analyze the impact of various tools used in big data analytics.
4. Calculate Mean, Median, Mode, Variance and Standard Deviation for the following data set (1,4,5,4,8). Write the definition and steps for the each.