BDA Question Bank

- 1. Define Big Data Analytics
- 2. Explain with a neat diagram Big Data Architecture design layer
- 3. Explain MapReduce Programming Model along with example (Example 4.1 and 4.2 from notes)
- 4. Explain MapReduce Process for client submitting a job
- 5. Explain MapReduce steps with neat diagram and apply the same on an example.
- 6. How do the task trackers cope up with node failure?
- 7. Illustrate application of mapreduce on Matrix application with steps
- 8. Illustrate features of Hive with advantages and limitation
- 9. What are the steps of Hive installation.
- 10. Difference between Hive database and RDBMS.
- 11. Explain Hive data types and file formats
- 12. Discuss HiveQL DDL with example.
- 13. Discuss partitioning of table.
- 14. Write short note on bucketing
- 15. What are the features of apache pig. Compare Apache Pig and Mapreduce and Apache Pig and Hive.
- 16. Discuss Pig Architecture.
- 17. Discuss Pig Latin Data Model
- 18. Write short note on Artificial intelligence
- 19. Explain the following i. Linear and non-linear ii. Outlier iii. Variance iv.linear and non-linear
- 20. Explain Probabilistic Distribution with Example (6.2).
- 21. Short note on ANOVA test
- 22. Discuss linear regression
- 23. How to do prediction using Regression Analysis
- 24. Discuss KNN
- 25. Different techniques for finding similarities.
- 26. Explain Market Basket Model
- 27. Define text mining. Explain text mining process phases with example.
- 28. Short note on SVM
- 29. Discuss web usage mining
- 30. How is the discriminative classifier used?
- 31. Short note on Hub and Authorities
- 32. Explain the following terms
 - i. Cluster Computing ii. Resource Management iii. Ecosystem
- 33. Differentiate MapReduce v1 and MapReduce v2.
- 34. With neat Diagram, explain Hadoop main components and ecosystem components.
- 35. List and explain features of Hadoop
- 36. Write a short note on

a. a) Zookeeper

- b) Oozie
- 37. Discuss the framework for distribution of job based on client application
- 38. With neat diagram, explain various system roles in Hadoop deployment
- 39. List & Explain core components of Hadoop.
- 40. What are the key benefits of HDFS Namenode Federation
- 41. How do Job-Tracker and Tasktracker function?
- 42. Explain the four important components of Apache Flume.
- 43. With neat diagram, explain Hadoop 2 Execution Model.
- 44. Explain the features of distributed computing architecture.
- 45. Discuss HDFS safe mode
- 46. Explain the features of distributed computing architecture.
- 47. Explain Brewers CAP theorem
- 48. How to increase flexibility for data manipulation
- 49. Compare NoSQL databases with SQL databases
- 50. Explain Trigger, View and Schedules in SQL databases
- 51. With neat diagram, explain CAP theorem in Big Data Solution
- 52. Illustrate Not Only SQL with example
- 53. What are the Characteristics of Graph DataBases
- 54. What is MangoDB?
- 55. Design document structure of a blog site for Mango BD.
- 56. How does an HTML object and XML based web service relate with tabular data stores.
- 57. What are the advantages of Key-value Store
- 58. Write short note on RC file format
- 59. Explain different XML document Pattern
- 60. Discuss Big Data table store