

Vidyalankar Institute of Technology
Semester 7 – CMPN - Mid Semester Assessment – 1

Date: 12/08/24	Big Data Analytics	30 Marks/60 mins. /1 hour
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1	Solve any two (5 marks each)	CO
A	Compare Big Data Analytics and Data Mining.	CO1
B	Justify Volume and Variety as key characteristics of Big Data.	CO1
C	Illustrate a real life application of BDA. Justify need of BDA for the same.	CO1
2	Solve any two (5 marks each)	
A	Give architecture of Hadoop Ecosystem. What is importance of ZooKeeper and Oozie.	CO2
B	Explain core components of Hadoop in detail.	CO2
C	What is CAP theorem? How is BASE property different from ACID property?	CO2
3	Solve any one (10 marks each)	
A	Illustrate with example, Map Reduce algorithm to compute total sales of each product category in last one year. Make suitable assumptions.	CO2
B	Illustrate with example, Map reduce algorithm that can be used to compute rank of web pages. Input is a matrix representing number of in-links from a page to a page and a vector that represents rank of each web page. The matrix is to be multiplied with rank vector to compute new rank. Make suitable assumptions.	CO2

CO1	Understand the building blocks of Big Data Analytics
CO2	Apply fundamental enabling techniques like Hadoop and Map Reduce in solving real world problems