3 Hours **Total Marks:80**

N.B. Question No: 1 is Compulsory
Attempt any three from the remaining
Assume suitable data wherever necessary

1	a	Compare Big data analytics with traditional data mining and warehousing system.	5
	b	With respect to data stream querying, give example of a) one time Queries b)continues queries c)predefined Queries d)ad-hoc queries	5
	c	How Big Data Analytics can be useful in the development of Digital India	5
	d	What are distance measures? Brief any two distance measures.	5
2	a	Explain K mean algorithms for large data set. Explain its significance as compared to other clustering algorithms.	10
	b	How Bloom filter is useful for big data analytics. Explain with one example.	10
3	a	Explain DGIM algorithm for counting ones in a window.	10
	b	Elaborate collaborative filtering system. How is the system different from a content based system.	10
4	a	Explain Hadoop ecosystem with core components? Explain the Physical Architecture of Hadoop. State its limitations	10
	b	What is the MapReduce? Explain the role of combiner with the help of an example.	10
5	a	Differentiate between a RDBMS and a No-Sql Database	10
	b	Explain the Clique Percolation Method (CPM) used in direct discovery of communities in a Social Graph with example.	10
6	a	List down the steps in HITS Algorithm with one example.	10
	b	Explain Park-Chen-Yu algorithm. How memory mapping is done in PCY.	10

BF8003E49DBD4ECBD94387E8FA5E0102