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**Question Paper Code: 95Q04**

M.E. DEGREE EXAMINATION, MAY 2024

Elective

Computer Science and Engineering

19PCS504 - BIG DATA ANALYTICS

(Regulation 2019)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART - A (5 x 20 = 100 Marks)

1. (a) What are the differences that separate out big data architecture from the Traditional one? CO1- App (20)

Or

(b) Describe cases where social network analysis is used to detect fraud CO1- App (20)

2. (a) Differentiate between SQL VsNoSQL and explain it with suitable example CO2- U (20)

Or

(b) Explain CAP theorem with its diagram CO2- U (20)

3. (a) What is HDFS? Illustrate the major blocks in HDFS architecture CO3- U (20)

Or

(b) What is Data flow Model? Discuss different kinds of Data flow Models. CO3- U (20)

4. (a) Write Map Reduce Pseudocode to multiply two matrices CO4- App (20)  
Illustrate the procedure on the following matrices

$$A = \begin{matrix} & 1 & 2 \\ 2 & & 1 \\ 3 & & 4 \end{matrix} \quad B = \begin{matrix} & 1 & 2 \\ 1 & & 3 \end{matrix}$$

Or

- (b) Consider a collection of literature survey made by a researcher in the form of a text document with respect to cloud and big data analytics. Using Hadoop and Map Reduce, write a program to count the occurrence of pre dominant key words. CO4- App (20)
5. (a) Describe features of Cassandra and its tunable consistency CO5- App (20)
- Or
- (b) What do you mean by HiveQL Data Definition Language? CO5- U (20)  
Illustrate any three HiveQL DDL command with its syntax and example