Reg.	No.
Keg.	INO.

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# **Question Paper Code: U2303**

#### M.E. DEGREE EXAMINATION, NOV 2024

Second Semester

Computer Science and Engineering

## 21PCS203 - BIG DATA ANALYTICS

(Regulations 2021)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

### PART A - $(5 \times 20 = 100 \text{ Marks})$

1. (a) Explain the key factors imposed by Business Intelligence on CO1-U (20) banking financial service and insurance.

Or

- (b) Describe the fraud and Risk of Big data. Describe cases where CO1-U (20) social network analysis is used to detect fraud with relevant examples.
- 2. (a) With suitable example differentiate the applications, structure, CO1-U (20) working and usage of different NoSQL databases

Or

- (b) Explain the significance of sharding and replication in distributed CO1- U (20) data models
- 3. (a) Explain in detail about Hadoop input and output operations CO1- U (20) Or
  - (b) What is Data flow Model? Discuss different kinds of Data flow CO1- U (20) Models
- 4. (a) Consider a collection of literature survey made by a researcher in CO2- App (20) 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.

Or

(b) Apply Map Reduce algorithm for Natural Join of two relations. CO1- U (20)

5. (a) Explain Pig data Model in detail and Discuss how it will help for CO1- U (20) effective data flow with an application.

## Or

(b) Explain in detail Storage mechanism in HBase. Compare Row CO1-U (20) oriented and Column Oriented database structures. How will you design or modify schema in HBase programmatically?