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Question Paper Code: U2303

M.E. DEGREE EXAMINATION, MAY 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 x 20 = 100 Marks)

1. (a) Illustrate the structure of Big data. Compare and Contrast big data architecture from the Traditional one? CO1-U (20)
Or
(b) Illustrate how business intelligence is applied on Health care and wellness application. CO1-U (20)
2. (a) With suitable example differentiate the applications, structure, working and usage of different NoSQL databases. CO2- App (20)
Or
(b) Apply Pig data model to explain the concepts of effective data flow. CO2- App (20)
3. (a) Describe briefly about Hadoop Input and Output and Illustrate with an example about the importance of data integrity? CO1-U (20)
Or
(b) Explain data serialization in AVRO with suitable example CO1-U (20)
4. (a) Write Map Reduce Pseudo code to multiply two matrices. CO2- 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) Apply Map Reduce algorithm for Natural Join of two relations CO2- App (20)

5. (a) Explain tunable consistency with all read and write consistency levels in Cassandra with a case study CO1-U (20)
- Or
- (b) Illustrate HiveQL Data Definition Language? Describe any three HiveQL DDL command with its syntax and example. CO1-U (20)