



**BHARATIYA VIDYA BHAVAN'S**

# **SARDAR PATEL INSTITUTE OF TECHNOLOGY**

MUNSHI NAGAR, ANDHERI (WEST), MUMBAI – 400 058, India

(Autonomous College Affiliated to University of Mumbai)

## **Mid Semester Examination**

Max. Marks: 60

Class: BE Computer

Course Code: CEE71B

Subject: Big Data Analytics

Duration: 1 Hr

Semester: VII

Date: 23/11/20

Time: 5 pm -7 pm

Instructions: (1) All questions are compulsory.  
(2) Use of scientific calculator is allowed.  
(3) Assume any necessary data but justify the same.

<b>Q. No.</b>	<b>Questions</b>	<b>Max Marks</b>	<b>CO</b>	<b>BL</b>
<b>Q. 1</b>	What are the drawbacks of traditional frequent pattern mining algorithm? Explain SON algorithm in detail with example? <b>OR</b> Using flajolet martin algorithm Find number of distinct elements from the the following sequence of stream 1 ,4,2,1,3,4,4,2,5,3,2,5,1,4,6,6,5,3 using hash function $H(a) = (2 * x + 2) \bmod 5$ .	10	CO 3	L2
<b>Q. 2</b>	What are the various features of Big data? explain with the help of example of Facebook and YouTube?	10	CO 1	L3
<b>Q. 3</b>	What is recommendation? what are various types of recommendation? Which recommendation is efficient for big data and why? <b>OR</b> Explain DGIM algorithm in detail with the help of example?	10	CO 4	L3
<b>Q. 4</b>	How you create a model to categorize tweets into positive negative and neutral, explain whole process with the help of example with the help of naïve bayes algorithm?	10	CO3	L3
<b>Q. 5</b>	What is No SQL? How NOSQL handles big data problems?	10	CO4	L3
<b>Q. 6</b>	Explain following Distance measures with the help of example? a. Euclidian distance b. Cosine distance c. Jaccard Distance d. Edit Distance	10	CO3	

### **Mid Semester Examination**

Max. Marks: 20

Class: TE Computer

Course Code: CE53

Subject: Data Warehousing and Mining

Duration: 1 Hr

Semester: V

Date: 17/09/19

Time: 10.00AM

Instructions: (1) All questions are compulsory.  
(2) Use of scientific calculator is allowed.  
(3) Assume any necessary data but justify the same.

### **Synoptic**

Q1. Online transaction processing, or OLTP, refers to a class of systems that facilitate and manage transaction-oriented applications, typically for data entry and retrieval transaction processing

- Current data
- Changeability: Frequent data changes
- Priority: High availability, High data volume
- Database Operation: Online update/insert/delete and read
- Normalization is very high
- Data Structure: Relational (flat tables)
- Integration: Minimal
- Data Set: 6-18 months

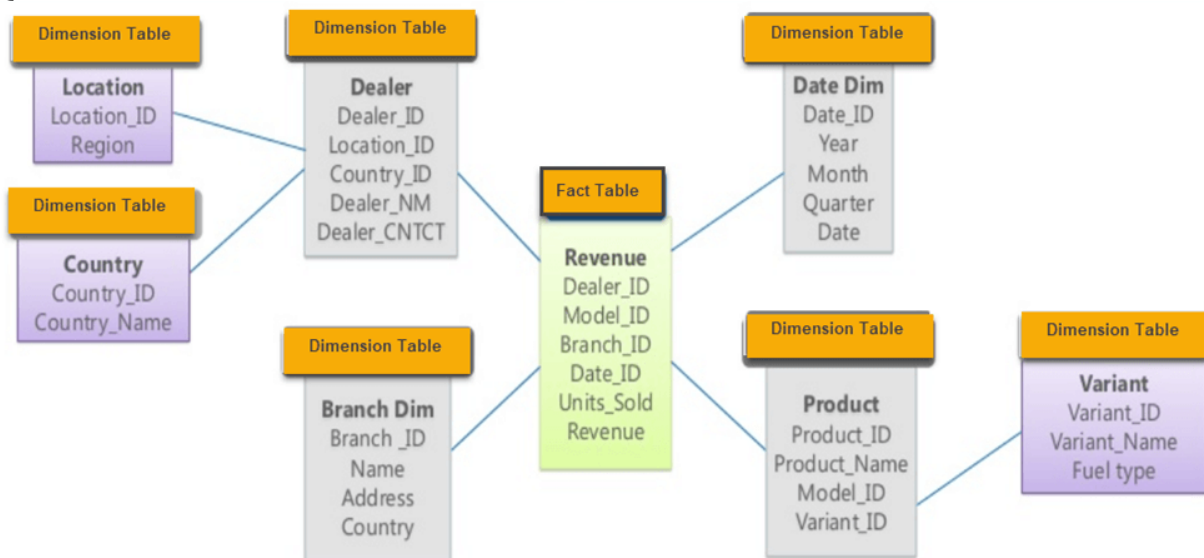
OLAP stands for On Line Analytical Processing, a series of protocols used mainly for business reporting. Using OLAP, businesses can analyze data in all manner of different ways, including budgeting, planning, simulation, data warehouse reporting, and trend analysis

- Current and historical data
- Changeability: Data frozen
- Priority: Simple to use, flexible access to data
- Database Operation: Read
- Less Normalization due to data staging and less performance
- Data Structure: Multi Dimensional format
- Integration: Comprehensive
- Data Set: 2-7 years ( Min 8 Points ) 0.5 Mark for each

**OR**

Subject Oriented, Integrated Nonvolatile, Time Variant explanation of each feature with example 1 mark each

Q2.



Q3. Correct Frequent Pattern Tree 4 Mark  
Correct Frequent Pattern set 2 marks

**OR**

Correct Frequent Pattern set 4 Mark  
Correct Association rules 2 marks

Q4.

Distance Matrix with correct results 4 marks

Correct Dendogram 2 Mark