

**SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)**

**(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai — 600 044.**

M.Sc. - END SEMESTER EXAMINATIONS NOVEMBER - 2022

SEMESTER - III

20PCSCT3008 - Advanced Database Management Systems

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Explain three techniques of partitioning data.
2. Illustrate the log based and procedural approaches to capture, and compare them. What are the variations in scheduling the apply step?
3. How does an abstract data type is used in Object-database system?
4. Describe about collection types in object database systems. Explain.
5. What important properties must recursive programs satisfy to be practical?
6. How is a typical data warehouse constructed?
7. What is the Apriori property? Describe an algorithm for finding frequent item sets.
8. Illustrate querying in XML data with example.

Section B

Part A

Answer any **TWO** questions ($2 \times 10 = 20$ Marks)

9. Explain the architecture of parallel database.
10. Consider the extended Dinky example and explain how it motivates the need for each of the following object-database features: user-defined structured types, abstract data types, inheritance and object identity.
11. An organization uses data warehouse for decision making. Elucidate the function of roll –up and cube in their OLAP operations.
12. What are the components of a decision tree? How are decision trees constructed?

Part B

Compulsory question ($1 \times 10 = 10$ Marks)

13. Name several applications that deal with spatial data and specify their requirements on a database system. What is a feature vector and how it is used?

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