

BACHELOR OF TECHNOLOGY (CBCS) (2014 COURSE)
B.Tech.Sem - VI Information Technology : WINTER : 2023
SUBJECT : ADVANCED DATABASE MANAGEMENT SYSTEMS

Day : Tuesday

Time : 10:00 AM-01:00 PM

Date : 21-11-2023

W-13419-2023

Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Assume suitable data, if necessary.
 - 4) Use of non-programmable **CALCULATOR** is allowed.
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- Q.1 Explain the process of mapping an EER schema to an Object database schema. (10)
- OR**
- Q.1 What is object behavior? How to specify the behavior of an object? (10)
- Q.2 What is I/O parallelism? How does partitioning helps parallelism? (10)
- OR**
- Q.2 What are distributed databases? Elaborate any approach used to store relations in distributed databases. (10)
- Q.3 What are materialized views? How do they improve performance of applications? (10)
- OR**
- Q.3 Explain the technique of query processing for the queries involving selection operations using file scans. (10)
- Q.4 Enlist characteristics of data warehouse? What are architectural strategies of building a data warehouse? (10)
- OR**
- Q.4 What is OLAP? Explain data modelling of snowflake schema with an example. (10)
- Q.5 Discuss the terms "clustering" and "classification" associated with data mining with suitable example. (10)
- OR**
- Q.5 What is a decision support system in data mining? Discuss in detail. (10)
- Q.6 What are performance benchmarks? Discuss standardization of databases. (10)
- OR**
- Q.6 Explain the spatial and geographical databases with suitable example. Why are they needed to be implemented as a separate category of databases? (10)

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