Day : Friday

Date : 25-11-2022

W-13419-2022

Time : 10:00 AM-01:00 PM

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.

Q.1 What is the role of object structure and object type constructors in modelling of complex objects? Explain in detail. **(10)**

OR

Q.1 Define ODMG. Explain the object model of ODMG in detail. **(10)**

Q.2 Write short notes on **(10)**
i) Skew in I/O parallelism
ii) Transaction servers

OR

Q.2 What is inter query parallelism? How is it achieved? **(10)**

Q.3 State and explain the parameters used to estimate results of expressions during query optimization. **(10)**

OR

Q.3 With regards to query optimization, explain in detail the process of choosing an evaluation plan from a set of equivalent evaluation plans. **(10)**

Q.4 Define data marts. Discuss the importance and types of data marts. **(10)**

OR

Q.4 What are OLAP and OLTP systems? How are they different from each other? **(10)**

Q.5 Enlist the steps of data mining and explain their applications in detail. **(10)**

OR

Q.5 Discuss the term "Information Retrieval System" with appropriate example. **(10)**

Q.6 What is Geographic Information system? What are the special features of databases required by these types of systems? State their applications. **(10)**

OR

Q.6 How is multimedia data stored and maintained in databases? Explain in detail the role, significance and implementation of multimedia databases? **(10)**

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