

Roll No .....

## MCSE-203

M.E./M.Tech., II Semester Examination, June 2020

### Advance Concept in Data Bases

Time : Three Hours

Maximum Marks : 70

**Note :** i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) What is the primary goal of normalization? How are the concepts of Functional dependency and multivalued dependency associated with normalization?  
b) Explain Tuples, key, schema and attributes.
2. a) Discuss the entity integrity and referential integrity constraints. Why is each considered important?  
b) Explain cost estimation in Query optimization.
3. What do you mean by Mobile databases? Discuss the characteristics of Mobile databases. Give an application of Mobile databases.
4. Explain the following term
  - i) Object oriented Data Model
  - ii) Object oriented DBMS.
5. What are the advantages of DDBMS over centralized DBMS? Why is data replication and fragmentation performed in DDBMS?
6. a) What do you mean by Data Marts and distributed data marts?  
b) Explain any one Data Mining Techniques.
7. a) Compare the relative merits of centralized and hierarchical deadlock detection in a distributed DBMS.  
b) Explain pipelining and Query language.
8. Write a short notes (Any three)
  - i) Data mining Statistics
  - ii) Star schema
  - iii) Concurrency control in Distributed Databases
  - iv) Syntax Analyzer

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