

Roll No. :

Total No. of Questions : 9 | [Total No. of Pages : 4

67057-N

**M.C.A. 2nd Semester (2 Year Course)
Examination, July-2021
(w.e.f. 2020-21)**

**ADVANCE DATABASE SYSTEMS
AND DATA WAREHOUSE
Paper-20MCA22C2**

Time : Three Hours] [Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note :- Attempt five questions in all, selecting one question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. (a) What OQL ?
- (b) What is type constructor ?
- (c) What is fragmentation of a relation ?

67057-N_600 (1) **RD-3082-B** P.T.O.

- (d) Why is data replication useful in DDBMS ?
- (e) What is GIS ?
- (f) What is mobile database ?
- (g) What is fact table ?
- (h) What is Data Mart ?

Unit-I

2. Explain with the help of suitable example the concept of generalization, specialization, aggregation and association in EER model.
3. (a) What are the advantages of object-oriented database approach for database management ? <https://www.mdustudy.com>
- (b) What is an object identifier ? Explain with the help of example. What are its advantages and disadvantages ?

Unit-II

4. What is distributed database ? Explain the various architectures of distributed databases ? What are the advantages and disadvantages of distributed databases ?

67057-N_600 (2) **RD-3082-B**

5. What is Parallel Database ? Explain the following in the context of parallel database :
- (a) Inter and Intra query parallelism
 - (b) Inter and Intra query operations

Unit-III

6. Explain following with their advantages and applications :
- (a) Temporal database concept
 - (b) Spatial databases
7. (a) What is XML ? What are the structuring concepts used to construct an XML document ? Explain each.
- (b) What is deductive database ? How rules are interpreted in deductive database ?

Unit-IV

8. What is OLAP ? Discuss the following OLAP operations with the help of examples :
- (a) Roll up
 - (b) Drill down
 - (c) Pivot
 - (d) Slice & Dice

9. (a) What is Data Warehouse ? How does it differ from a database ?
- (b) What is Data Cube ? How is it used in data warehousing ? Explain with the help of example.