

Roll No.

Total Printed Pages - 3

F - 3957**B.C.A.(Part-II) Examination, 2022****(Old Course)****Paper Fourth****DBMS (ORACLE, SQL)****(202)***Time : Three Hours]**[Maximum Marks:100**[Minimum Pass Marks : 40]***Note: Attempt any two parts from each question. All questions carry equal marks.****Unit - 1**

1. (a) What is data abstraction? Discuss level of abstraction at which database may be viewed?
- (b) Explain the term 'Database'. What are various advantages and disadvantages of DBMS?
- (c) Describe the functions and responsibilities of a database administrator.

P.T.O.**Unit - II**

2. (a) Explain the concept of weak and strong entity.
- (b) Describe the design of an E-R database scheme in detail.
- (c) Write short note on
 - (i) Candidate key & primary key
 - (ii) Specialization and aggregation

Unit - III

3. (a) Write short note on relational algebra.
- (b) What is join? Explain the types of join.
- (c) Write short note on
 - (i) Integrity constraints
 - (ii) Set operation.

Unit - IV

4. (a) Explain third normal form (3NF) and BCNF with example.
- (b) Discuss pitfalls in database design.

F - 3957

[3]

- (c) Explain join dependency and lossless join decomposition.

Unit - V

- 5. (a) Explain alter table and drop table command with example.
- (b) Explain any three data manipulation command with example.
- (c) Explain the "group by" and "order by" clause.