



**AI-1348**

**B. C. A. (Part-III)**

**Term End Examination, 2020-21**

*Paper : Fifth*

**INTRODUCTION TO RDBMS (ORACLE)**

*Time Allowed : Three hours*

*Maximum Marks : 100*

*Minimum Pass Marks : 33*

*Note : Answer all questions. All questions carry equal marks.*

**Unit-I**

1. (a) Explain Network approaches.
- (b) What do you understand by DBMS? Explain their access methods.

**Or**

- (a) Explain the different kinds of DBMS users.

1348

PTO

(b) Explain different type of data models.

**Unit-II**

2. (a) What do you mean by keys? Explain their types in detail.
- (b) How to convert ER-Model into relational schema.

**Or**

- (a) What is ER-Model? Explain entities attributes and relationship with diagram or flowchart.
- (b) Make an ER-diagram for school management system.

**Unit-III**

3. (a) Write different types of join statement with example for each.
- (b) Write the relational algebra query for the following statements.
  - (i) Selection of all customers from an account relation who lives in Mumbai and have balance > 20,000.

1348

(ii) Selection of name and roll number of all students in a library relation who lives in Mumbai and have atleast one book issued.

Or

- (a) Explain integrity constraints with examples.
- (b) Explain simple and complex queries using relational algebra.

**Unit-IV**

4. (a) Explain normalization concept in logical model.

(b) What is BCNF and 3NF.

Or

- (a) Explain pitfalls in Database design with examples.
- (b) Compare 4NF and 5NF.

**Unit-V**

5. (a) Explain SQL and its environment.

(b) Describe SQL constructs like SELECT, FROM, WHERE, GROUP BY, HAVING, ORDER BY.

Or

- (a) Explain SQL as data manipulation language :
  - (i) Inserting data in a table
  - (ii) Deleting data in a table
  - (iii) Retrieving data in a table.
  - (iv) Updating data in a table.
- (b) Give any five clauses that can be used with select statement.