



RB-3973-74

B. Sc. (IT) (Sem. IV) Examination

April / May – 2010

RDBMS - I

Time : 3 Hours]

[Total Marks : 100

RB-3973

Instructions :

(1)

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| नीचे दृशावेव निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book. | Seat No. : |
| Name of the Examination : | <input type="text"/> |
| <input type="text" value="B. Sc. (IT) (Sem. 4)"/> | <input type="text"/> |
| Name of the Subject : | <input type="text"/> |
| <input type="text" value="RDBMS - 1"/> | <input type="text"/> |
| Subject Code No. : <input type="text" value="3"/> <input type="text" value="9"/> <input type="text" value="7"/> <input type="text" value="3"/> | Section No. (1, 2,.....): <input type="text" value="1"/> |
| | <input type="text" value="Student's Signature"/> |

(2) Write section I and Section II in **separate** sheet. Differentiate subject code.

(3) Draw the figure and give example whenever necessary.

1 Answer the following. (any **three**) 15

- (i) What is integrity constraint? Explain referential integrity constraint with example.
- (ii) Explain functional dependencies with proper example.
- (iii) Explain the concept of aggregation.
- (iv) Explain data independence.

2 Answer the following (any **three**) 15

- (i) What is DDL? Explain any **three** DDL statements.
- (ii) Write a note on data types in Oracle.
- (iii) Explain GROUP BY and HAVING clauses with example.
- (iv) What is de-normalization? What are its effects in database performance? In which situations de-normalized database is required?

3 Explain GRANT and REVOKE in Oracle. 5

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| Name of the Subject : | |
| <input type="text" value="RDBMS - 1"/> | |
| Subject Code No. : <input type="text" value="3"/> <input type="text" value="9"/> <input type="text" value="7"/> <input type="text" value="4"/> | Section No. (1, 2,.....) : <input type="text" value="2"/> |

(2) Write section I and Section II in **separate** sheet. Differentiate subject code.

(3) Draw the figure and give example whenever necessary.

4 Explain normalization process with appropriate example. 8

5 Create following tables with required constraints: 12

Student(stud_id,first_name,middle_name,last_name,phone)

Course(course_id,course_name)

Result(stud_id, course_id,marks)

-Marks should not take value greater than 50.

Display result for the following queries" :

(a) Display students not having phone number.

(b) Display result of "RDBMS" students.

(c) Display students whose first name starts with B.

(d) Display average result of each course.

6 Answer the following (any **three**) 15

(1) Explain the significance of Data Dictionary. What does it contain?

(2) What is a view? What are the advantages of defining views ? How to create and delete views?

(3) Explain sub-queries with example. How a sub query differs from a join query?

(4) Explain any five functions in Oracle with example.