22416

12425

03 Hours / 70 Marks Seat No. | | | | | | | | |

Instructions – (1) All Questions are *Compulsory.*

(2) Illustrate your answers with neat sketches wherever necessary.

(3) Figures to the right indicate full marks.

(4) Assume suitable data, if necessary.

(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any FIVE of the following : **10**

a) Define :

i) Primary key

ii) Foreign key

b) State the use of "between-and" with example.

c) What is view ? Write a syntax to create view.

d) Write the syntax to create sequence.

e) Define cursor ? List two types of cursor.

f) Enlist the types of Database user.

g) What are the advantages of concurrency ?

Marks

2. Attempt any THREE of the following : **12**

a) Explain Not Null and Unique constraint with syntax.

b) Write syntax and example of –

i) Insect command

ii) Update command

c) What do you mean by index ? Explain its types. Write syntax to create index.

d) Explain any four aggregate function with example.

3. Attempt any THREE of the following : **12**

a) Explain for loop in PL/SQL with example.

b) Explain states of transucation with neat diagram.

c) Explain group by clause with example.

d) Give syntax for creating view. Consider following schema.

Account (Account_no, Name, Account_type, PAN - number, Balance)

Create view on Account having attribute (Account_no, Name, PAN_no) where balance is less than 1000.

4. Attempt any THREE of the following : **12**

a) Draw and explain block structure of PL/SQL.

b) What are the differences between view and table. Write the restrictions of using DML commands with view.

c) Define join. Write the types of joins with example.

d) Describe Grant and Revoke command with example.

e) Write PL/SQL program of implicit cursor to count number of rows updated by update statement.

Marks

5. Attempt any TWO of the following : **12**

a) Consider the following relations for database that keeps track of student enrollment in courses and subjects for each course.

Student (ssn, name, DOB)

Course (Course_Id, Name, Dept, subject)

Enroll (ssn, course_id, semester, grade)

Write a relational algebra for following :

i) Find all students details registered for course id 10.

ii) Find various subjects for semester higher than 3.

iii) Select all courses available in institute.

b) Consider the following schemas

car(carid, model, date manufacturing)

owner (ownerid, carid, o_name)

accident_details (accidentno, date_of_accident, carid, amount)

i) Display carids with year of accident - 1995

ii) Display carid, model, year and name of owner of all cars.

iii) Update damage amount of carid "3146" to 10000.

iv) Display total number of cars of each owner.

v) Display the details of all cars with month of manufacturing as November.

vi) Display accident details of all accidents with amount more than 15000.

c) Write a PL/SQL block to accept total marks and obtained marks. Print "successful", if student passes. (Assume passing above 35%).

Marks

6. Attempt any TWO of the following : **12**

a) Explain ACID properties of transucation.

b) Write PL/SQL program which accept the customer id from user and if user enter invalid ID then exception invalid_id is raised using exception handling.

c) Write a syntax and example for.

i) Create view.

ii) Alter view

iii) insert row into base table using view.
