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BHARATIYA VIDYA BHAVAN'S

SARDAR PATEL INSTITUTE OF TECHNOLOGY

MUNSHI NAGAR, ANDHERI (WEST), MUMBAI – 400 058, India
(Autonomous College Affiliated to University of Mumbai)

executed

Duration: 1 hour **UCID:**
Marks: 25 Marks
General Instructions:
Viva will be taken at the time of practical as well as after the practical if required.
The figures to the right indicate full marks.
If you are using any additional information, state it clearly.
Once you finish with the code show it to the examiner for testing. Write your answer in Word file and upload it on Moodle.

Q. A) I	**Consider the bank database given below. The primary keys are underlined and the data types are specified:** **BRANCH**(branch_name:varchar2(30),branch_city:varchar2(30),assets:number(10)) **CUSTOMER**(customer_name:varchar2(30),customer_street:varchar2(30), customer_city:varchar2(30)) **ACCOUNT**(account_number:number(10),customer_name:varchar2(30), branch_name:varchar2(30), balance:number(10)) a) Create the above tables by properly specifying the primary keys and the foreign keys and named constraints. b) Enter atleast five tuples for each relation. c) List the details of all customers who belong to the 'P K Road' branch. d) List the customers who live in Mumbai and have their branch in Nagpur city . e) Give the details of all customers who have a balance above Rs.100000	10
B)	Create a trigger, which will display a message 'Balance below minimum!', whenever an updation of the ACCOUNT table causes the balance to fall below Rs. 1000.	10
C)	List the customers who have the same living city and branch city	5

A] a. Create database prac_exam;
use prac_exam;
Create table branch (branch_name varchar(30) primary key, branch_city varchar(30), assets int);
Create table customer (customer_name varchar(30) primary key, customer_~~city~~ street varchar(30), customer_city varchar(30));
Create table account (account_number int primary key, customer_name varchar(30), branch_name varchar(30), balance int);
Alter table account add constraint foreign key fk1 (customer_name) references customer (customer_name);
Alter table account add constraint foreign key fk2 (branch_name) references branch (branch_name);

6. insert into customer values ('shayak', 'military road', 'mumbai')
('akhara', 'azad nagar', 'mumbai'), ('adik', 'dombivali', 'mumbai')
('nidhi', 'bandra', 'mumbai'), ('nimmal', 'road', 'nashik');

insert into branch values ('andheri', 'mumbai', 10), ('bandra', 'mumbai', 20),
('badlapur', 'mumbai', 5), ('churchgate', 'mumbai', 8), ('vasai', 'mumbai', 30);
insert into account values (1, 'shayak', 'andheri', 9999999),
(2, 'nidhi', 'bandra', 999999), ~~(3, 'athana', 9999999);~~
(3, 'athana', 'andheri', 9999999), (4, 'adik', 'badlapur', 99999),
(5, 'nimmal', 'andheri', 9999);

7. Select * from customer where customer_name in (select customer_name
from account where branch_name = 'andheri');

8. Select * from customer where customer_name in (select customer_name from
account branch_name in (select branch_name from branch where branch_city =
'mumbai')) and customer_city = 'nashik';

9. Select * from customer where customer_name in (select customer_name from
account where balance > 100000

10. Create definer = 'root'@'localhost' trigger 'Question_6'
After update on 'account'
for each row
Begin
if new.balance < 1000 then
signal sqlstate '45000' set message_text = 'Balance below minimum!';
end if;
end;
→ update account set balance = 999 where customer_name = 'adik';

11. Select * from customer ~~account~~ C where C.customer_name in (select
customer_name from account where branch_name in (select b.branch_name
from branch b where b.branch_city = C.customer_city));

drop database prac_exam;