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*executed*  
*JK*

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. 1 A)	Consider the reservation database given below. The primary keys are underlined and the data types are specified:  Sailor ( <u>Sname</u> : varchar(50), s_rating: number(10)) Boat ( <u>bname</u> : varchar(50), color: varchar(20), b_rating: number(10)) Reservation ( <u>sname</u> : varchar(50), <u>bname</u> : varchar(50), weekday: varchar(50)) 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) Write SQL query to create a view of Sailor table where rating is 10. d) Write SQL query to find boat details and Sailor details using join. e) Create Primary Index on Boat's name.	10
B)	Write PL/SQL trigger that raises an exception when number of Sailor's are greater than 5.	10
C)	Write PL/SQL code to show all the constraints defined on Sailor relation.	5

Q1A) Create database reservation;  
use reservation;

- a) Create table Sailor (Sname varchar(50) primary key, s\_rating int);
- Create table Boat (bname varchar(50) primary key, color varchar(20), b\_rating int);
- Create table reservation (sname varchar(50), bname varchar(50), weekday varchar(50));
- alter table reservation add constraints foreign key FK1 (sname) references sailor (sname);
- alter table reservation add constraints foreign key FK2 (bname) references boat (bname);

Q1B) insert into sailor <sup>values</sup> ('Yash', 5), ('Pratik', 4), ('Shiv', 5), ('Akash', 5), ('Tejas', 3);  
insert into boat <sup>values</sup> ('thousand sunny', 'yellow', 5), ('Going marry', 'white', 5), ('orobus', 'red', 4), ('remaid', 'green', 3), ('bob', 'grey', 2);  
insert into reservation <sup>values</sup> ('Yash', 'thousand sunny', 7), ('Pratik', 'Going marry', 10), ('Shiv', 'orobus', 5), ('Tejas', 'remaid', 4), ('Akash', 'bob', 2);

Q1 c) → create view rating as  
Select sname, s-rating  
From sailor where s-rating > 10;

Select \* from rating;

Q1 d) → Select A.\*, B.\* From sailor as A  
left outer join reservation as R on A.sname = R.sname  
right outer join ~~reservation~~ boat as B on R.bname = B.bname

Q1 e) → create index primary-index on boat (bname);

Q2) → create Definer = 'root'@'localhost' TRIGGER 'sailor\_insert'  
before insert on 'sailor'. for each row begin  
~~declare~~  
declare C int;  
Set C = (Select count(sname) From sailor);  
IF (C) > 5 then  
Signal SQLSTATE '45000'  
SET MESSAGE-TEXT = 'ERROR: Number of sailor is greater than 5';  
End if;  
End.

Q3) →  
Select column-name, constraint-name, reference-column-name,  
referenced-table-name.  
From information-schema.key-column-usage  
where table-name = 'sailor';