

Duration: 1 hour

UCID: 2023510048

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 University database given below. The primary keys are underlined and the data types are specified: Student (<u>snum</u> :number, sname:string, major:string, level:string, age:number) Class (<u>cname</u> :string, meet_at:number, room:number, not null, fid:number) Enrolled (<u>snum</u> :number, <u>cname</u> :string) Faculty (<u>fid</u> :number, fname:string, not null, deptid:number) 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 grant insert and delete privilege to RMAN user on Class relation. d) Write SQL query to display Student details in which faculty Anita is teaching. e) Write SQL query to revoke all the permission from RMAN on Student relation.	10
B)	Write a PL/SQL function to print table of a given number. Eg: $12 \times 1 = 12$	10
C)	Write a PL/SQL code to display total number of students and teachers for each class.	5

Q1A) a) (i) create table Student (snum primary key, sname varchar(30), major varchar(30), level varchar(30), age int);

(ii) create table Class (cname varchar(30) primary key, meet_at int, room int not null, fid int);

(iii) create table enrolled (snum int, cname varchar(30));
alter table enrolled add constraint fk1 foreign key (snum) ^{or References} Student(snum);
alter table enrolled add constraint fk2 foreign key (cname) references student(cname);

create table Faculty (fid int primary key, fname varchar(30), deptid int);

(b) insert into values ('1', 'Aadith', 'MCA', 'Fy', 23),
(^2, 'Dhormesh', 'CE', 'sy', 22), ('3', 'Chirag', 'MCA', 'sy', 28)
(4, 'Yash', 'EE', 'Fy', 24), ('5', 'Pratham', 'MCA', 'Fy', 23);

insert into class values ('MCA', 2, 402, 2), ('CE', 4, 404, 3),
(^EE', 2, 401, 1), ('symCA', 10, 403, 4), ('ME', 12, 410, 5);

insert into Faculty values (1, 'Anita', 1), (2, 'Harshil', 2), (3, 'Savika', 3),
(4, 'Aarti', 4) (5, 'Pallavi', 5);

insert into Enrolled values (1, 'FyMCA'), (2, 'EE'), (3, 'symCA'),
(4, 'EE'), (5, 'FyMCA');

(C) Grant insert and delete access:-

Create user 'RMAN' identified by 'RMAN';
grant insert on student.class to 'RMAN';
grant delete on student.class to 'RMAN';

(d) Revoke privilege(s)
ON student.student
FROM 'RMAN';

(B) create database number;
use number;
create a function 'table_func'()
begin
declare
i number(3)
n number(1)
table_func = i * n