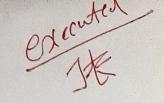


## BHARATIYA VIDYA BHAVAN'S

## SARDAR PATEL INSTITUTE OF TECHNOLOGY

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



Duration: 1 hour

Yash Routela

UCID: 2023510047

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 (snum:number,sname:string, major:string, level:string, age:number) Class (cname:string,meet_at:number, room:number,not null, fid:number) Enrolled (snum:number, cname:string) Faculty (fid,:numberfname: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 SOL query to find average age of each class.	10
	<ul> <li>c) Write SQL query to find average age of each class.</li> <li>d) Write SQL query to display class details where faculty Anita is teaching.</li> <li>e) Write SQL query to drop all the constraints defined on Faculty relation.</li> </ul>	
B)	Write a PL/SQL Function to find factorial of a given number.	10
C)	Write a PL/SQL block to grant all the privileges to RMAN user on Student table.	5

Q1 A)

(a) · (reate table student (snum primary key, sname worther (20), major varihar (20), level worder (20), age int);

major varihar (20), level worder (20) primary key, need at int, noom int not null, fid int);

· create table enrolled (snum int, cname varichar (20),

foreign key (snum) references student (snum), foreign key (cname)

prefrences class (cname);

· create table faculty (fid int primary key,

frame varichar (20) not rull, deptid int);

(b) Insert into student values (1, "mohit", "mca", "fy", 23),

(2, "some", "brech", "fy", 18), (3, "Suman", "mca", "sy", 24),

(4, "namesh", "mca", "fy", \$20), (5, "suresh", "btech", "ty", 22).

· Insert into class values ("bca", 23, 401, 11), ("mce", 54, 405, 22) ("blech", 21, 404, 33), ("mtech", 40, 202, 44), ("bse", 33,403,55); · Insert into enralled values (1, 'mce'), (2, 'btech'), (3, 'mca'), (4, 'mca'), (5, 'btech'); - Invent into faculty values (22, "john", 675), (55, "nick", 546), (33, "chois", 786), (66, "carla", 657), (11, "ros", 123); (c) Select c. (nome as Clard-Nome, ang (sage) as Average Age from Clors c. join enralled e on c. chane = e-chame
join students on e.snum = S.snum group by c. chame; (d) select c. \* from class c join faculty on c. fid = ffid where f. Jrome = 'Arrita'; (e) Alter table faculty Drop primary key; B) (rate Definer = root & lacothast junction : Calc-Jectorial (num INT) noturns int Deterministic Begin Declare fact-volue int default 1; Declare i int default 2; If rum ( 0 then signal squatate '45000' set medage-text= Factorial of negative numbers is undfined; Else If rum <= 1 then return 1; Flore while i <= rum

Do set fact-volue = fact-volue \* i;

set i = i+1; End While; Return ject-value; C) Grout All Privileges on University. student to 'RMAN' @'localhost'; Solict \* from student where solery IN(25000, 30000); Questionly Examiner