



Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous College Affiliated to University of Mumbai)

Mid Semester Examination

Max. Marks: 20

Class:S.E.

Course Code:IT 43,CE42

Duration: 1Hrs
Semester:IV

Branch:Information Technology,Computer
Name of the Course: Database Management Systems

Instruction:

- (1) All questions are compulsory
- (2) Draw neat diagrams
- (3) Assume suitable data if necessary

Q No.		Max. Marks	CO
Q.1a	<p>Consider following Schemas</p> <p>1) Employee(empid, empname, DeptId, contactno, emailid, empheadid) Note : empheadid (head's are some of the employees from the same relation)</p> <p>2) empdept(DeptId, DeptName,DeptHead) Note : (DeptHead is the foreign key from empid)</p> <p>3) EmpProject(EmpId, ProjectId, ClientId, StartYear, EndYear)</p> <p>Write the following queries in Relational Algebra</p> <p>1.Find the empname, deptname, deptHead from the given schema</p> <p>2.Select all employee Id, and Project Ids with start year is 2015.</p>	4	2
Q.1b	<p>Consider the schema given is QNO 1a</p> <p>Write the following queries in SQL</p> <p>1. Select the detail of employee whose emailId is in gmail</p> <p>2. List the total number of employees in each project.</p> <p>3.Select the name of the employee who is working under" Abhishek".</p>	6	2
Q.2	<p>Write any two functions of DBA</p> <p style="text-align: center;">OR</p> <p>Write the purpose of physical and logical data Independence in DBMS.</p>	2	1
Q.3	<p>What are four categories of End Users in DBMS. What is their role in the system,justify in one line</p>	4	1
Q.4	<p>With example draw following concepts using ER notations and give description</p> <p>1) Partial Participation</p> <p>2) Total Participation</p> <p style="text-align: center;">OR</p> <p>With the help of example show the mapping of Generalization and Aggregation to the Relational Model.</p>	4	1