



**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 Synoptic**

March 2020

**Max. Marks: 20**

**Class: SE (Comp, IT)**

**Course Code:CE42**

**Name of the Course: Database Management Systems**

**Duration: 60Mins**

**Semester: IV**

**Branch: Computer**

Question No.	
Q.1	Identification of Database Website- 1 Mark Two Issues if database system could not operate effectively- 4 Marks (2 X 2=4 Marks) It can be in terms of; <ol style="list-style-type: none"><li>1) Data redundancy</li><li>2) Data Isolation</li><li>3) Data consistency</li><li>4) Data Security</li><li>5) Data Concurrency</li></ol>
Q.2	Benefits of data modeling- 3 Marks <ol style="list-style-type: none"><li>1.Focussing on essentials</li><li>2.Ease of communication and understanding</li><li>3.Product or process improvement</li><li>4.Exploring alternatives</li></ol> Purpose of Model (2 X 1=2 Marks)  OR Purpose of CODD'S Rules- 1 Mark How to determine whether a DBMS is relational and to what extent it is relation.  Rule -4 Marks (2 X 2=4 Marks) Rule 2: Guaranteed Access Rule Rule 3: systematic Treatment of Null Values
Q.3	Note : Each correct query 1 mark <ol style="list-style-type: none"><li>1. <math>\pi</math> sname(<math>\pi</math> sid((<math>\pi</math> pid <math>\sigma</math> color=' red' Parts) Catalog) Suppliers )</li><li>2. <math>\pi</math> sid(<math>\pi</math> pid(<math>\sigma</math> color=' red' <math>\vee</math> color=' green' Parts) catalog)</li><li>3. <math>\pi</math> sname (<math>\sigma</math> address='mumbai' Suppliers)</li><li>4. <math>\pi</math> pname (<math>\sigma</math> color=' red' <math>\vee</math> color=' yellow' Parts)</li><li>5. <math>\rho</math> (R1,<math>\pi</math> sid((<math>\pi</math> pid <math>\sigma</math> color=redParts) Catalog)) <math>\rho</math> (R2,<math>\pi</math> sid <math>\sigma</math> address=221PackerStreetSuppliers) R1UR2</li></ol>



Q.4

SQL Solutions :

**Note : Each correct query 1 mark**

1) select \* from employee where deptid = 10 and monthllysal > 30000;

2) select \* from employee where deptid not in(10,30);

OR

2) select \* from employee where deptid != 10 and deptid != 30;

3) select \* from employee where FNAME like 'S%H'

OR

3) select \* from employee where LNAME like 'S%H'

4) select lname as "SURNAME", monthllysal\*12 as "Salary per Annum" from employee;

5) select deptid, count(deptid) from employee group by deptid having count(deptid) > 3;