**NAVRACHANA UNIVERSITY**
*a UGC recognized University*

**School:** School of Engineering and Technology
**Program/s:** BCA
**Year:** 2nd **Semester:** 3rd
**Examination:** End Semester Examination
**Examination year:** December - 2021

**Course Code:** CA219 **Course Name:** RDBMS
**Date:** 08.12.2021
**Time:** 8:30 to 10:30am

**Total Marks:** 40
**Total Pages:** 1

*Instructions:*

➔ *Write each answer on a new page.*
➔ *Use of a calculator is not permitted.*
➔ *Draw all the required diagrams.*
➔ *\* COs=Course Outcome mapping. # BTL=Bloom's Taxonomy Level mapping*

| Q. No. | Details | Marks | COs* | BTL# |
|---|---|---|---|---|
| **Q.1** | Explain in detail any 5 basic operations of relational algebra using the below tables. **Department Table** <br> Emp_Name / Department <br> Joel / Finance <br> Anna / Marketing <br> Monica / HR <br> **Employee Table** <br> Name / Area / City <br> Joel / Maninagar / Ahmedabad <br> Riya / Karelibaug / Vadodara <br> Anna / Navrangpura / Ahmedabad <br> Rohan / Vasna / Vadodara | 10 | CO1 | BT2, BT3, BT6 |
| **Q.2** | Define Relational Database Management System. Explain in detail ACID properties. | 10 | CO1.CO2 | BT1, BT2, |
| **Q.3** | Explain in detail the following terms: <br> a. Data blocks <br> b. Extents | 05 | CO3 | BT1, BT2 |
| **Q.4** | Explain in detail relational calculus with proper examples. | 05 | CO2 | BT1, BT2, B3 |
| **Q.5** | Write a short note on LOCKS | 10 | CO2 | BT1, BT2 |

***********End of Question Paper***********