

**PARUL UNIVERSITY – PARUL INSTITUTE OF
TECHNOLOGY
COMPUTER SCIENCE AND ENGINEERING DEPARTMENT
Subject: Database Management System (303105203)**

Assignment 3

Last date to submit: Sep 2023

- Define the terms Functional Dependency with example?
- Define the terms Armstrong's axiom? Explain the different rules of it?
- Define the terms closure of FD? Explain the steps to calculate closure of FD with example?
- How to calculate super key in FD with example?
- Explain 3NF with example?
- Explain 4NF with example?
- Explain BCNF with example?
- Explain lossless join decomposition with example?
- Explain lossy decomposition with example?
- Explain the steps of query processing with neat sketch diagram.
- How to measure the query cost? What are the different factors of it.
- Explain selection operation with linear search & binary search algorithm?
- Explain the terms mitralisation with example? What is the disadvantage of it?
- Explain the term query optimization? What are the different approaches of it with example?