

# Department of Computer Science and Engineering, BUET



#### **COURSE OUTLINE**

**Course Code: CSE 216** 

**Course Title: Database Sessional** 

Level/Term: 2/2 Section: A+B

Academic Session: 2018-19

**Course Outline:** 

Oracle SQL: Selection, Aggregation, Join, Sub-query; Oracle DML and DDL Statements; Oracle PL/SQL: Functions, Triggers, and Procedures; Design of a Database; Designing and Implementing multi-platform Database.

## **Learning Outcomes/Objectives:**

After undergoing this course, students should be able to:

- i. Learn basic SQL statements in Oracle like selection, projection, filtering, and aggregation, and data manipulation statements like insert, update, and delete statements.
- ii. Learn complex SQL statements like join and sub-query
- iii. Learn Oracle PL/SQL Statements to write functions, procedures, and triggers.
- iv. Design, analyze, and implement a database for a real-world system.

#### **Assessment**

1. Participation in lab classes - 10%

2. Online Assessments - 40%

3. Project - 30%

4. Final Quiz - 20%

### **Text and Reference books:**

a. Oracle-SQL-PL-SQL - A Brief Introduction, by Sukarna Barua [Reference]

b. SQL, PL/SQL the Programming Language of Oracle by Ivan Bayross [Reference]



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## Weekly Schedule:

| Week No. | Topic Name   |
|----------|--|
| 1        | Outline with Grading Policy and Reference books Lecture on Basic Database Design |
| 2        | Design Practice Class  |
| 3        | Full Design Online   |
| 4        | Basic SQL Class + Practice   |
| 5        | Advanced SQL Class + Practice  |
| 6        | SQL Online Quiz  |
| 7        | PL/SQL Class + Practice  |
| 8        | PL/SQL Online  |
| 9        | Project  |
| 10       | Project  |
| 11       | Project  |
| 12       | Project  |
| 13       | Quiz   |
| 14       | Reserve  |