



Sub Committee for Curriculum Development

Course Name: SQL Programming

(UG/PG): UG

Number of Credits: 4

Level: 3

Learning Objective(s): This course is designed to give the basics of SQL programming through hands-on exercise to students.

The student will learn the programming from simple to complex level. By the end of course students will able to code in programming in Database Technology

Pre-requisites:

NIL

Pedagogy:

- Lectures
- Presentations
- Hands-on lab sessions

Course Outline:

Sr. No.	Topics	Hrs
1.	Revision of Database concepts and SQL	4
2.	SQL in Detail : Select command with all clauses Table Constraints Joins Subqueries	7
3.	Introduction to SQL Programming SQL Programming Advantages & Disadvantages. Character Set, Data types (Character, Raw, row id, Boolean, binary integer, number), Variable, Constants, blocks, Attributes, Operators	7
4.	Control Structures Condition – if, Iterative - loop, for, while, sequential – go to.	8
5.	Procedures/Functions : Built in functions - Numeric, character, date User defined Function - Definition and implementation, Executing Non-Query DML & DDL statements, Sub programs and procedures(Definition, features, creating procedures, Parameters type	9

6.	Cursor Management Opening a cursor variable from a query, Closing cursor variables, Restrictions using cursor variables. Procedures with cursor. Significant features of cursor Management	9
7.	Error handling Concept of Exception, Pre-defined exceptions, user defined exceptions.	8
8.	Triggers Database triggers (definition, syntax, parts of triggers (statement, body, restricted), types of triggers, enabling and disabling triggers), Predicates (inserting, updating and deleting	8
	Total	60

Book Recommended:

- SQL,PL/SQL by Ivan Bayross
- Learning MySQL by O'reilly
- MySQL. The Complete Reference By Vikram Vaswani
- Website for MySQL <http://dev.mysql.com>

Research Papers/Articles recommended for reading: NA

Suggested Evaluation Methods:

- Assignments
- Hands on lab work
- Written examination
- Quizes

Parallel/Similar courses the existing curriculum:

S.No.	Name of the course	Institute where it was offered
<u>1</u>	RDBMS	SICSR

Name of Member	Dr. Tejaswini Apte	Prof. Samaya Pillai	Prof. Anuja Bokhare	
Designation	Asst. Prof.	Asst. Prof.	Asst. Prof.	
Org. / Inst.	SICSR	SICSR	SICSR	
Signature				

Name of the Expert:

Signature:

Date: