CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE · INDIA

DEPARTMENT - COMPUTER SCIENCE

Course Pack
FOR
ORACLE LAB-CSC351

CSC351 - ORACLE LAB

Total Teaching Hours For Semester : 30 **Total Teaching Hours For Semester : 2**

Max Marks : 50 **Credits : 2**

Course Objectives/Course Description:

Provides the hands on the SQL language for retrieving the data from the database in different scenarios. Theprimaryfocusistounderstandrelationaldatabaseconceptsanddesignby using SQL.

Learning Outcome

Upon successful completion ofthe course students will beable to• Design and implement programminglogic for a relational database.• Manipulatedata stored in an OracleDBMS using Oracle SQL.

Unit-1 **Teaching Hours:30**

Oracle

1. SQL*Plus and SQL **04 Hrs**a. Introductionb. Logging on to SQL*Plus and Leaving SQL*Plusc. Choosing and Describing Tablesd. Elements of the SQL Querye. Editing SQL Statementsf. The SystemDummy Table g. Selecting Columnsh. Duplicate Information (DISTINCT)i. Sorting Information 2. SQL Functions **04 Hrs**a. TheConcatenation Operatorb. Column Aliasesc. String Functionsd. ArithmeticFunctions e. Date Functions3. Advanced SQL Functions **02 Hrs**a. Select withMinus, Union and Intersectb. Handling NULL 4. FilteringData Using Where **02 Hrs**a. Where Operatorsb. Where withKeywords and LogicalOperators 5. Group By and Group By Functions **02 Hrs**a. Group Function Examplesb. Group Function with Having 6. Data Definition Language (DDL) **04 Hrs** a. Create, Drop Alter b Tables c. Column d. Views e. Object f. Alter table 7. Data Manipulation Language (DML) **02 Hrs** a. Insert,b. Update c. Delete 8. Integrity Constraints **02 Hrs**a. Types of constraintb. Referential Integrityc. Defining Constraints9. Retrieving Data from Multiple Tables **04 Hrs**a.Joining Tables (Equi-Joins, Non-Equi-Joins)b.Aliases forTable Names 10. Sub-Queries **04 Hrs**a.Basic Sub queriesb.Multiple Column sub queries c. Sub querieswith Having

Text Books And Reference Books:

[1] Kevin Loney, *Oracle Database 11g The Complete Reference,* *Oracle Press,* McGraw Hill Professional, 2008.

Essential Reading / Recommended Reading:

[1] Steven Feuerstein**, Bill Pribyl ,** *Oracle PL/SQL Programming*, 6th Edition, Paperback**, 2014.**

Evaluation Pattern

50% - CIA50% - End Semester

Course Plan

Class Name : 3CMS **Subject Name : ORACLE LAB**

Subject Code : CSC351 **Teacher Name : UMMESALMA.M, VAIDHEHI.V, NIJUP.JOSEPH, AROKIA.RAJAN**

Planned Date	No of Hours	Unit	Heading	Details	Method	Reading/Ref
29/05/2018 02/06/2018	2.00	Unit-1	Oracle	SQL*Plus and SQL a. Introduction b. Logging on to SQL*Plus and Leaving SQL*Plus c. Choosing and Describing Tables d. Elements of the SQL Query	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
04/06/2018 09/06/2018	2.00	Unit-1	Oracle	SQL*Plus and SQL e. Editing SQL Statements f. The System Dummy Table g. Selecting Columns h. Duplicate Information (DISTINCT) i. Sorting Information	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
11/06/2018 16/06/2018	2.00	Unit-1	Oracle	SQL Functions a. TheConcatenation Operator b. Column Aliases	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
18/06/2018 23/06/2018	2.00	Unit-1	Oracle	SQL Functions c. String Functions d. Arithmetic Functions e. Date Functions	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
25/06/2018 30/06/2018	2.00	Unit-1	Oracle	Advanced SQL Functions a. Select with Minus, Union and Intersect b. Handling NULL	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
02/07/2018 07/07/2018	2.00	Unit-1	Oracle	Filtering Data Using Where a. Where Operators b. Where with Keywords and Logical Operators	DEMO CIA 1	
09/07/2018 14/07/2018	2.00	Unit-1	Oracle	Group By and Group By Functions a. Group Function Examples b. Group Function with Having	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
16/07/2018 21/07/2018	2.00	Unit-1	Oracle	DDL a. Create, Drop Alter b Tables c. Column	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
23/07/2018 28/07/2018	2.00	Unit-1	Oracle	DDL d. Views e. Object f. Alter table	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
30/07/2018 04/08/2018	2.00	Unit-1	Oracle	Data Manipulation Language (DML) a. Insert, b. Update c. Delete	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
13/08/2018 18/08/2018	2.00	Unit-1	Oracle	Integrity Constraints a. Types of constraint b. Referential Integrity c. Defining Constraints	DEMO CIA 2	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
20/08/2018 25/08/2018	2.00	Unit-1	Oracle	Retrieving Data from Multiple Tables a. Joining Tables (Equi-Joins, Non-Equi-Joins)	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
27/08/2018 01/09/2018	2.00	Unit-1	Oracle	Retrieving Data from Multiple Tables b.Aliases for Table Names	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
03/09/2018 08/09/2018	2.00	Unit-1	Oracle	Sub-Queries a.Basic Sub queries	DEMO CIA3	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm
10/09/2018 15/09/2018	1.00	Unit-1	Oracle	Sub-Queries b.Multiple Column sub queries c. Sub queries with Having	DEMO	https://docs.oracle.com/cd/B28359_01/server.111/b28286/queries.htm

CIA OVERALL

Component/Task 1

CIA Details

Apply the DBMS concepts using ORACLE for the various scenarios.Submit the programs on time

and maintain a neat record forthe same. • CIA I is the regular assessment of programs from the list of programs. Each program carries 10 marks and the Evaluation Rubrics for each program is as follows:§ Timely Submission (2 marks)§ Correctness of the program (2 marks)§ Complexity of the program (2 marks)§ Validation & Formatting (2 marks)§ Concept Clarity (Viva) (2 marks)• There is no exclusive Mid Semester and End Semester Practical Examination.• CIA II and CIA III are conducted to evaluate the students based on list of given programs.• CIA IV is conducted to evaluate the students based on out of lab list programs.• Students are uploading the programs after the evaluation by the concerned faculty member and mark is awarded.• If a student fails to appear for any of the Test, there will be only one repeat test conducted in the last week of the semester. To appear for the repeat test, the student has to apply for the same one week before the scheduled date. Appearance in the re-test is subject to the approval by the Course Coordinator and Head of the Department.

CIA Details will display form 07/06/2018

Evaluation Rubrics

Category	Component	Description	Marks
CIA – 50 Marks	CIA I	Program from the List	40
	Online submission	Submission of programs online after evaluating by the concerned teacher	5
	Attendance	Course attendance	5
ESE - 50 Marks	CIA II	Test1 (Program from the lab list)	10
	CIA III	Test2 (Program from the list)	20
	CIA IV	Test 3 (Program – outside the list)	20
	Total		**100**

Course Plan Reference Materials

1. csc351-Reference

III Semester

CSC331: Database Management Systems and Software Engineering

Essential Reading

[1] Elmasri & Navathe, *Fundamentals of Database Systems,* 5th Edition, Addison – Wesley, 2007.

Recommended Reading

[1] O`neil Patric and O`neil Elizabeth, *Database Principles Programming and Performance,* 2nd Edition, Margon Kaufmann Publishers Inc., 2001.

[2] Silberschatz, Korth, Sudarshan, *Database System Concepts*, 5th Edition, McGraw Hill, 2006.