

B.C.A. (Honours) & B.C.A. (Honours with Research)
(Semester - 3 and Semester - 4)
Saurashtra University
To be effective from June – 2024



CS – 18 Practical Based on CS - 15, CS- 16 and CS -17		
Objectives: <ul style="list-style-type: none"> • To apply theoretical concepts through practical application. • To develop practical skills in various aspects of OOP, DBMS and framework usages like WordPress. 		
Prerequisites: <ul style="list-style-type: none"> • Knowledge of OOP • Knowledge of DBMS • Knowledge of Basic Web Development 		
No	Topics	Details
1	Functions in C++, Classes, Inline Function, Friend Function, Special Member Function	<ul style="list-style-type: none"> ➤ Practically implementation of C++ and OOP which includes: <ul style="list-style-type: none"> • Inline Function • Default Arguments • Return by Reference • Friend Function • Private Member Function • Constructor • Multiple Constructor in a class • MIL
2	Inheritance, Compile Time Polymorphism, Run Time Polymorphism, Exception Handling	<ul style="list-style-type: none"> ➤ Practically implementation of C++ and OOP which includes: <ul style="list-style-type: none"> • Inheritance • Operator Overloading • Type Conversion • Virtual Base Class • Virtual Function • Pure Virtual Function • Manipulators • Exception Handling



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3	DML Commands, Constraints, Joins, Subquery, Built-in Functions	<ul style="list-style-type: none">➤ Practically implementation of RDBMS Using Oracle which includes:<ul style="list-style-type: none">• DDL, DCL, DML and TCL Statements• Constraints• Joins• Subquery• Built-in Functions• View
4	Sequence, PL/SQL Objects	<ul style="list-style-type: none">➤ Practically implementation of RDBMS Using ORACLE which includes:<ul style="list-style-type: none">• Sequence• PL/SQL Block• Cursor• Trigger• Package• Nested Table
5	CMS using WordPress	<ul style="list-style-type: none">➤ Designing of Web site in WordPress which includes:<ul style="list-style-type: none">• Post• Pages• Plugins• Theme Creation• Widgets• Working with Functions.php• Shortcode• Custom Post Types

Course Outcomes:

- Able to get knowledge about a comprehensive understanding of Object-Oriented Programming and their features.
- Able to gain practical experience in designing WordPress website including posts, pages, theme creation etc.
- Student will able to implement RDBMS features like procedure, trigger, view and other PL/SQL objects
- Student will get practical skills in OOP, WordPress website design, and implementation of RDBMS features using Oracle.