

# SYLLABUS 2021-2022

CLASS: 11

SUBJECT: COMPUTER SCIENCE

UNIT	CONTENT
<b>Unit-I</b> <b>1. Introduction to Computers</b>	1.1. Introduction to Computers 1.2. Generation of Computers 1.4 Data and information
<b>2. Number System</b>	2.1. Introduction 2.2. Data Representation 2.3. Different Types of Number System 2.4. Number System Conversion 2.5 Binary Representation for signed Numbers
<b>3. Computer Organisation</b>	3.1. Introduction to Computer Organization 3.2 Basics of Microprocessor 3.4 Types of Microprocessor 3.5 Memory Devices
<b>4. Theoretical Concepts of Operating System</b>	4.1 Introduction to Software 4.2 Introduction to Operating System 4.3 Types of Operating System 4.5 Prominent Operating System
<b>5. Working with Windows Operating System</b>	5.1 Introduction to Operating System 5.2 Introduction to Windows Operating System 5.5 Windows Desktop 5.6 The Window 5.7 Application Window 5.8 Document Window 5.9 Elements of Window 5.11 Managing Files and Folders
<b>UNIT - II</b> <b>6 Specification and Abstraction</b>	6.1 Algorithms 6.2 Algorithmic Problems 6.3 Building Blocks of Algorithms 6.4 Algorithm Design Techniques 6.5 Specification 6.6 Abstraction

<b>7. Composition and Decomposition</b>	7.1 Notations for Algorithms 7.2 Composition 7.3 Decomposition
<b>8. Iteration and Recursion</b>	8.1 Invariants 8.2 Loop Invariants
<b>Unit - III</b> <b>9 Introduction to C++</b>	9.1 Introduction 9.2 Character Set 9.3 Lexical Unit 9.4 Input/Output Operators 9.5 Sample Program in C++ 9.6 Execution of C++ 9.8 Types of errors 9.10 Introduction to datatypes, variables and Expressions 9.11 Concept of Datatype 9.12 C++ data types 9.13 Variables
<b>Unit - III</b> <b>10 Flow of Control</b>	10.1 Introduction 10.2 Statements 10.4 Selection Statements 10.5 Iteration statements
<b>Unit - III</b> <b>11. Functions</b>	11.1 Introduction 11.2 Need for functions 11.3 Types of functions 11.5 User defined functions 11.6 Methods of calling functions 11.8 Returning from function 11.9 Recursive function 11.10 Scope Rules of variables
<b>Unit - III</b> <b>12. Arrays and Structures</b>	12.1 Introduction 12.2 Types of Arrays 12.3 Two dimensional Array 12.4 Array of Strings

<b>Unit - IV</b> <b>13. Introduction to Object Oriented Programming Techniques</b>	13.1 Introduction 13.3 Basic Concepts of OOP 13.4 Advantages of OOP 13.5 Disadvantages of OOP
<b>Unit - IV</b> <b>14. Classes and Objects</b>	14.1 Introduction to Classes 14.2 Creating Objects 14.3 Memory allocation of objects 14.4 Referencing class members
<b>Unit - IV</b> <b>15. Polymorphism</b>	15.1 Introduction 15.2 Function overloading 15.4 Operator overloading
<b>Unit - IV</b> <b>16. Inheritance</b>	16.1 Introduction to Inheritance (page no.260) 16.2 Need for Inheritance 16.3 Types of Inheritance 16.4 Derived Class and Base class
<b>Unit - V</b> <b>17. Computer Ethics and Cyber Security</b>	17.1 Introduction 17.2 Ethical Issues
<b>Unit - V</b> <b>18. Tamil Computing</b>	Entire Unit

## PRACTICAL

<b>CLASS: 11</b>		<b>SUBJECT: COMPUTER SCIENCE</b>	
<b>Sl.No</b>	<b>Topic</b>		
1	Gross Salary		
2	Percentage		
3	Palindrome		
4	Number Conversion		
5	Fibonacci Prime Series		