DEPARTMENT OF SCHOOL EDUCATION

TAMIL NADU

Syllabus

2020 - 21

STANDARD - 11

QB365-Question Bank Software

State Council of Educational Research and Training
Chennai 600 006

SYLLABUS 2020-2021

CLASS: 11 SUBJECT: COMPUTER SCIENCE

UNIT	CONTENT
Unit-I 1. Introduction to Computers	1.1. Introduction to Computers 1.2. Generation of Computers 1.4 Data and information
2. Number System	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
3. Computer Organisation	3.1. Introduction to Computer Organization 3.2 Basics of Microprocessor 3.4 Types of Microprocessor 3.5 Memory Devices
4. Theoretical Concepts of Operating System	4.1 Introduction to Software 4.2 Introduction to Operating System 4.3 Types of Operating System 4.5 Prominent Operating System
5. Working with Windows Operating System	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
UNIT - II 6 Specification and Abstraction	6.1 Algorithms 6.2 Algorithmic Problems 6.3 Building Blocks of Algorithms 6.4 Algorithm Design Techniques 6.5 Specification 6.6 Abstraction

7. Composition and Decomposition	7.1 Notations for Algorithms 7.2 Composition 7.3Decomposition
8. Iteration and Recursion	8.1 Iterative statement 8.2 Loop Invariants
Unit - III 9 Introduction to C++	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
Unit - III 10 Flow of Control	10.1 Introduction 10.2 Statements 10.4 Selection Statements 10.5 Iteration statements
Unit - III 11. Functions	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 functions 11.9 Recursive function 11.10 Scope Rules of variables
Unit - III 12. Arrays and Structures	12.1 Introduction 12.2 Types of Arrays 12.3 Two dimensional Array 12.4 Array of Strings

Unit - IV 13. Introduction to Object Oriented Programming Techniques	13.1 Introduction 13.3 Basic Concepts of OOP 13.4 Advantages of OOP 13.5 Disadvantages of OOP
Unit - IV 14. Classes and Objects	14.1 Introduction to Classes 14.2 Creating Objects 14.3 Memory allocation of objects 14.4 Referencing class members
Unit - IV 15. Polymorphism	15.1 Introduction 15.2 Function overloading 15.4 Operator overloading
Unit - IV 16. Inheritance	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
Unit - V 17. Computer Ethics and Cyber Security	17.1 Introduction 17.2 Ethical Issues
Unit - V 18. Tamil Computing	Entire Unit

PRACTICAL

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