

## SYLLABUS 2020-2021

**Class : XII**  
**Subject : COMPUTER SCIENCE**  
**Book : COMPUTER SCIENCE WITH JAVA (SUMITA ARORA)**  
**Publisher : DHANPAT RAI AND CO.**

### Term 1

1. Boolean algebra and computer hardware

- \* Propositional logic
- \* Binary valued quantity
- \* Theorems, duality
- \* K-map
- \* Simplification of equations
- \* Application of gates
- \* Basic laws and demorgan's law

2. Revision of programming (class XI)

- \* Arrays (s.d.a and d.d.a )
- \* Methods , strings , files and recursion
- \* Call by value / reference (passing objects)

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## **Term 2**

### 1. Chapter 12 : Concept of inheritance

- \* Need of inheritance
- \* Types of inheritance
- \* Super keyword
- \* Abstract class and interface
- \* Method overriding

### 2. Chapter 13 : Exception handling

- \* Try , catch and finally block
- \* Various types of exceptions

### 3. Chapter 14 : Simple data structure

- \* Linear stack and linear queue
- \* Single linked list

### 4. Chapter 10: Operation on files

- \* Operations using text files
- \* Operations using binary files

## **Term 3**

### 1. Chapter 14 : Recursive data structure

- \* Introduction to recursive data structure
- \* Linked list
- \* Trees / Tree traversal
- \* Algorithms of data structure

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## 2. Chapter 16: Computational complexity

- \* Big O notation
- \* Estimation of complexity / analysis

### **Term 4**

Revision of all the topics

Worksheets

Discussion of Sample Question papers

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#### **Contact Us**

Seth M.R. Jaipuria School, VineetKhand, Gomti Nagar, Lucknow – 226010, U.P., India  
Phone: +91-522-2726502, 8009858887