

YEAR PLAN 2018 – 2019

SUBJECT: COMPUTER APPLICATIONS Grade: X

The academic year is divided into **two** sessions

Session One: June 2018 to August 2018

Session Two: September 2018 to November 2018

Summative Assessment: August 2018

Model Exam I: December 2018

Model Exam II: January 2019

AIM: To empower students by enabling them to build applications in Java.

ENDURING UNDERSTANDING: Students gain the ability to logically analyse problems and derive the most optimum solution.

OBJECTIVES: To help students learn fundamental concepts of computing using object oriented approach in Java.

First session- June – August 2018

SUMMATIVE ASSESSMENT 1

DURATION	TOPICS	Specific Learning Objectives	Activities	Resources
(Summer Classes) March- April	Chapter 13- Arrays	Storing, retrieving and arranging data using various sorting and searching algorithms.	<ol style="list-style-type: none"> Notes on key terms Reading the text and marking the important points Problem solving Assignments Practical on output problems and debugging code snippets 	<ul style="list-style-type: none"> Teacher's Notes and Question Bank Past examination papers. Additional Reference Textbooks – by Dheeraj Malhotra, APC by Pandey and Dey and Morning Star Guides – Together With, Frank Question Bank, Oswal Question Series. Practice papers from the Websites : icseguess.com , guideforschool.com Performance Analysis of previous board examinations
June	Chapter 13- Arrays Chapter 1 -Concept of Objects Chapter 2 - Introducing classes	Arrays (continued) Introduction to object, state, behavior, encapsulation, abstraction. Understand class as a blueprint, object factory.	<ol style="list-style-type: none"> Notes on key terms Reading the text and marking the important points Problem solving Exercises from the text books Assignments Class Tests (Fortnightly) Practical on output problems and debugging code snippets 	<ul style="list-style-type: none"> Teacher's Notes and Question Bank Past examination papers. Additional Reference Textbooks – by Dheeraj Malhotra, APC by Pandey and Dey and Morning Star Guides – Together With, Frank Question Bank, Oswal Question Series. Practice papers from the Websites : icseguess.com , guideforschool.com Performance Analysis of previous board examinations
July	Chapters 6, 7- Classes, Constructors	Class as a composite type, distinction between primitive type and composite or class types. Types of constructors. Use of 'this' and 'new' keywords.		
August	Continuation of Classes Recap of chapters done in term 1. First Summative Assessment <i>Onam Holidays</i>	Concepts of call by reference, Static variables and Static data members. Revise and enable students to attempt the paper well.		

SUMMATIVE ASSESSMENT 2 (September to November 2018)

September	Chapter 12 Encapsulation Chapter 8 - Library Classes – the String class	Access specifiers and scope and visibility Access specifiers – private and public. Visibility rules for private, package and public access specifiers. Scope of variables, instance variables, argument variables, local variables. Simple input/output. String class, Exceptions, Wrapper classes, packages and import statements.	<ol style="list-style-type: none"> 1. Notes on key terms 2. Reading the text and marking the important points 3. Problem solving 4. Exercises from the text books 5. Assignments 6. Class Tests (Fortnightly) 7. Practical on output problems and debugging code snippets 	<ul style="list-style-type: none"> • Teacher's Notes and Question Bank • Past examination papers. • Additional Reference Textbooks – by Dheeraj Malhotra, APC by Pandey and Dey and Morning Star • Guides – Together With, Frank Question Bank, Oswal Question Series. • Practice papers from the Websites : icseguess.com , guideforschool.com
October	Continuation of Chapter 8	Simple input/output. String class, Exceptions, Wrapper classes, packages and import statements.	<ol style="list-style-type: none"> 1. Notes on key terms 2. Reading the text and marking the important points 	<ul style="list-style-type: none"> • Teacher's Notes and Question Bank • Past examination papers.
November	Chapter 8 - Input/Output Chapter 11 Scanner class	Basic input/output using Scanner and Printer classes from JDK.	<ol style="list-style-type: none"> 3. Problem solving 4. Exercises from the text books 5. Assignments 6. Class Tests (Fortnightly) 7. Practical on output problems and debugging code snippets 	<ul style="list-style-type: none"> • Additional Reference Textbooks – by Dheeraj Malhotra, APC by Pandey and Dey and Morning Star • Guides – Together With, Frank Question Bank, Oswal Question Series. • Practice papers from the Websites : icseguess.com , guideforschool.com
<p>Projects/ Field trips: 10 programs with variable description and output covering all the topics of the syllabus to be printed and submitted in a spiral bind file. Facilitators : Mrs. Armin Shroff, Ms.Kavitha, Mr.Jills Text Book: Computer Applications by Sumita Arora.</p>				