

YEAR PLAN 2018 – 2019
GRADE VIII COMPUTER APPLICATIONS

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

Session One: June 2018 to October 2018

Session Two: November 2018 to March 2019

Continuous assessments: July, August, December , January, February

Summative Assessment I: October 2018

Summative Assessment II: March 2019

Please check the **index page** in the notebooks for Continuous Assessment marks.

AIM:

- To become competent, confident, responsible and critical user of technology.
- To develop the appropriate social skills that are essential for co-operative and collaborative learning.
- To take ownership of their own learning.
- To acquire knowledge and skills in using Information and Communications Technology (ICT) to accomplish tasks, communicate, and facilitate activities.
- To develop awareness in regard to the developments and emerging issues concerning computing and society;
- To develop critical and analytical thinking skills for practical solutions.
- To develop creative skills for problem solving.
- To learn the basics of programming using Java.

Enduring Understanding: One problem can have different solutions.

Objective: To develop logical solutions to a problem using algorithms and then convert the algorithms to programs.

Project: Group work - Design a useful application with any software.

Session One: June – October 2018

Duration	Topics	Specific Learning Objectives	Activities	Resources
June	Chapter 1: Introduction to Programming App Development (Not evaluated)	<ul style="list-style-type: none"> • Understand programming and its need • Explore Program Development Life Cycle • Explore commonly used website and mobile apps. • identify different types of apps; • list uses of apps; • classify apps; 	<ul style="list-style-type: none"> • Seminar by a software developer. • Interview a programmer on PDLC • Explore Window App and Google app store and list the apps under different categories. • Asking children to share their experiences of using an app by them or by any other member in their family. • Develop a presentation on different apps 	<ul style="list-style-type: none"> • Programming Practices and Techniques • Teachers' Worksheets • Java: A Beginner's Guide, Herbert Schildt • Computer Applications (GradeX): Sumita Arora ;
July	Chapter 2: Programming Tools	<ul style="list-style-type: none"> • Design algorithm and learn to break a task into finite logical steps. • Learn the keywords used in pseudocode and the symbols used in flowchart 	Design algorithm for day to day tasks.	<ul style="list-style-type: none"> • Computer Applications by Pandey and Dey • Websites like :
July	Chapter 3: Programming Languages	<ul style="list-style-type: none"> • Study the trend in computer programming languages. 	Group presentation on programming languages Programming using Scratch (Identify the constructs, variables and constants in Scratch)	http://www.javabeginner.com/ http://mentalfloss.com/article/28052/10-funny-and-fabulous-flowcharts
August	Chapter 4: Structured Programming Techniques	<ul style="list-style-type: none"> • Learn different logical constructs • Understand the concepts of variables, data items and operators. 	Programming Practical to learn about variables, constants , operators and expressions in Java	http://www.cimt.plymouth.ac.uk/projects/mepres/book8/bk8i1/bk8_1i2.htm

	Onam holidays	<ul style="list-style-type: none"> Learn to write simple programs in Java to understand the difference between variables and constants; Write simple expressions using different operators. 	<p>Solve output problems</p> <p>Dry run and debug algorithms and source codes.</p>	http://www.code.org
September	Chapter 5: Sequence Construct	<ul style="list-style-type: none"> More practice on writing pseudocode and flowchart that follow sequential construct. 	<p>Designing algorithms that depict sequential logic.</p> <p>Practical Sessions</p>	
October	Chapter 6: Introduction to Java Revision and remedial for First Summative Exam	<ul style="list-style-type: none"> Converting the above algorithms to Java code. Clarify doubts; perfect the topics done in First Summative Session. 	Solve Revision worksheets.	
Session Two: November 2018 to March 2019				
November	Chapter 5: Sequence Construct Chapter 6: Introduction to Java	<ul style="list-style-type: none"> Converting the above algorithms to Java code. Enable the students to solve problems on Sequence construct. 	<ul style="list-style-type: none"> Designing algorithms that depict decision making or selection construct. Writing programs and practical sessions Solve output problems Dry run and debug algorithms and source codes. 	<ul style="list-style-type: none"> Programming Practices and Techniques Teachers' Worksheets Java: A Beginner's Guide, Herbert Schildt Computer Applications (Grade X): Sumita Arora ; Computer Applications by Pandey and Dey Websites like : http://www.javabeginner.com/ http://mentalfloss.com/article/28052/10-funny-and-fabulous-flowcharts http://www.cimt.plymouth.ac.uk/projects/merpres/book8/bk8i1/bk8_i12.htm http://www.javaguicodexample.com/javaprogramexampleusejgrasp2.html
	Networks	<ul style="list-style-type: none"> Define a network and its components Differentiate between types of network. explain the ways in which data moves over The network. 	Free network simulation resource: www.teach-ict.com/gcse_new/networks/hardware/resources/NWB_SIM.swf	
December	Chapter 7: Selection Construct	<ul style="list-style-type: none"> Understand the role of decision making in problem solving. Learn to write Pseudocode and flowcharts that depict decision making. 		
January	Chapter 7: Selection Construct Chapter 8: Decision Making In Java	<ul style="list-style-type: none"> Enable the students to solve any given problem that involves decision making. Write Pseudocode and flowcharts and then convert those into programs in Java 	<p>Designing algorithms that depict selection construct</p> <p>Writing programs and practical sessions</p>	
February	Chapter 8: Decision Making In Java Revision	<ul style="list-style-type: none"> Enable the students to do more output problems based on Selection Construct. 	<p>Solve output problems</p> <p>Dry run and debug algorithms and source codes.</p>	
March	Remedial and Revision Second Summative Exam			
<p><i>Facilitators' name: Mr. John Kurian , Mrs. Rosmary Michael, Mr. Jills</i></p> <p><i>Text book: Programming Practices and Techniques (Compiled by Mrs. Armin Shroff)</i></p> <p>Our Blog: computerapplication976.wordpress.com for updates on worksheets and sample papers.</p>				