

ST. FRANCIS XAVIER SCHOOL
COMPUTER APPLICATIONS
CLASS X
SYLLABUS 2021-2022

UNIT I

HALF YEARLY

LOGIX Computer Applications		LOGIX Computer Applications	
Ch No.	Name of the Chapter	Ch No.	Name of the Chapter
			Topic
1	OOP concept		OOP
2	Introduction to Java		What is object, Encapsulation, class
3	Values and Data types		Abstraction, Object factory
4	Operators in Java		Byte code, Operation & expression
6	Input in java		Data types, Tokens, Variables
7	Mathematical library functions		Constants, byte code, compilation of java
8	Conditional construct in java		Method main
9	Iterative constructs in Java		Java character set
			Decision making Statements
			Programming structure
Revising basic java concepts			Selection statement (if and switch)
			Obtaining input using Scanner class
			Object, Class
			Member variables
			Object implementation
			Instantiating an object, Access specifier
			Object as an instance of class
14	Arrays		Need of arrays, Creating an array
			Types- Single dimensional array
			storing value in 1D array, Accessing the elements
			Searching: Linear & Binary Search
		5	User Defined Methods
			Function definition
			advantages, invoking methods
			Returning from a function
			pure & impure method
			Function overloading
			Calling of overloaded functions
			call by value (programs), call by reference
			(only definition with an example.)
			static and nonstatic methods
		11	Constructors
			What is a constructor? Need of it.
			Types of constructor, this keyword
			constructor overloading.
			Constructor vs Method
		15	String Handling
			Creating string
			Methods used in string- Definition with an example
			programs based on the above methods. searching
			for string using linear search.

Syllabus for Half yearly including Project Work (20 programs from class object concept, If else & switch, loop, Constructor, Method overloading, String functions)
Ch- 1,2,3,4,5,6,7,8,9,11,14,15 & project submission (1st part)
& project submission on or before 02/08/2020 (1st part)

Syllabus for UNIT I : Ch 1,2,3,4,6,7,8,9,14 and Practical programs to be practiced.

UNIT II**REHEARSAL**

LOGIX Computer Applications			LOGIX Computer Applications		
Ch No.	Name of the Chapter	Topic	Ch No.	Name of the Chapter	Topic
13	Encapsulation & Inheritance	Encapsulation, Access specifier Scope and visibility rules Implementing encapsulation	12	Library classes	Primitive, Composite datatypes User defined data types Wrapper class Methods in wrapper class Numeric wrapper class methods Utility of wrapper class methods Auto Boxing and Un Boxing in Wrapper Classes
9	Iterative Constructs in Java	For loop While loop Do while loop Comparison of loops & jump statement			

Syllabus for Annual**Ch 1,2,3,4,5,6,7,8,9,11,12,13,14,15 & practical programs .****Syllabus for UNIT 2 including project work**

(20 programs from the assignment sheet)

Ch- 1,2,3,4,5,6,7,8,9,13 & Project Submission (2nd part) & project submission on or before 06/12/2021 (2nd part)