

Core Java		
Test	Content	Scheduled Date
ST1	<b>Introduction to Java:</b> Java introduction, history and goals of Java, fundamentals of Java, overview of JDK, JVM, garbage collection. <b>Java Basics:</b> identifiers, keywords, Java data types & operators. <b>Control Statements:</b> decision constructs, using loop constructs, command line arguments. <b>Working with Arrays:</b> creating and using arrays (1-D, 2-D and multi-dimensional arrays), jagged arrays. <b>Bitwise Operators:</b> Bitwise OR, Bitwise AND, Bitwise XOR, Bitwise Complement, Bit-Shift Operators. <b>Objects and Classes:</b> Classes, objects and methods, defining a class, Access Control, Method overloading, constructors, constructor overloading, use of this and static. <b>Inheritance:</b> working with inheritance, inheritance basics & types, using super, method overriding, dynamic method dispatch, final keyword.	28 <sup>th</sup> April 2023
ST2	<b>Abstract Methods &amp; Interfaces:</b> built-in packages and user defined packages, interfaces: declaration, implementation, extending classes and interfaces. <b>Strings:</b> Introduction, Immutable String, Methods of String class, StringBuffer class & StringBuilder class, toString method, StringTokenizer class. <b>Exception Handling:</b> exception handling fundamentals, exception types, try and catch, multiple catch clauses, nested try, throw, throws and finally, creating custom exception. <b>Multithreading:</b> Java thread model, main thread, creating thread by implementing runnable and extending thread class, creating multiple threads, using isAlive() and join(), thread priorities, synchronization.	19 <sup>th</sup> May 2023
ST3	<b>Generics:</b> introduction, generic example, generic class, generic method, generic constructor and generic interfaces. <b>Collections Framework:</b> introduction, collection interfaces, list, queue, set (Overview), Collection classes, ArrayList, LinkedList, Iterator, working with maps (Overview), comparable & comparator, arrays, vector, stack. <b>IO Streams:</b> stream classes, byte streams, character streams, stream tokenizer. <b>JDBC Connectivity:</b> introduction, architecture, establishing JDBC database connection.	2 <sup>nd</sup> June 2023
ETE		5 <sup>th</sup> June-9 <sup>th</sup> June