**PG.GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Session Odd Semester**

**(2018-19)**

**Class: Name of the Teacher: Jasdeep Kaur**

**Subject:** **Java Programming Period :1st**

**Paper :** **BCA-16-503 Room No : 202**

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| **S. No** | **Date From** | | **Date Upto** | **Topics to be covered** |
| Week 1 | **(For ongoing classes)** | | | Java and the Internet: The Java programming language and its characteristics; Java development kit, Java run- time environment; Java compiler Fundamentals of Java: Java Vs. C++, Byte Code, Java Virtual Machine. |
| July 24, 2018 | | July 28, 2018 |
| Week 2 | July 30, 2018 | August 4, 2018 | | constants, variables, data types, operators, expressions, control structures. |
| Week 3 | August 6, 2018 | August 11, 2018 | | defining class, creating objects, accessing class members, constructors, Garbage Collection, method overloading. |
| Week 4 | August 13, 2018 | August 18, 2018 | | Inheritance: Different types of Inheritance, member access, using super keyword to call super class constructors, creating a multilevel hierarchy, method overriding, dynamic method dispatch, using abstract classes, using Final keyword. |
| Week 5 | August 20, 2018 | August 25, 2018 | | Arrays and Strings: One-dimensional and two-dimensional Arrays, String Handling using String and StringBuffer class, String Functions. |
| Week 6 | August 27, 2018 | September 1, 2018 | | Packages: Types of packages, defining a package, Importing packages. |
| Week 7 | September 3, 2018 | September 8, 2018 | | Access protection Interfaces: Defining an Interface, Implementing Interfaces, Variables in Interfaces, Achieving multiple inheritance using interfaces, Interface and Abstract classes |
| Week 8 | September 10, 2018 | September 15, 2018 | | Exception Handling: Java Exception handling model, Types of exception, using Try and catch. |
| Week 9 | September 17, 2018 | September 22, 2018 | | Multiple Try and Catch clauses, Nested Try statements, finally block, user defined exceptions. |
| Week 10 | September 24, 2018 | September 29, 2018 | | Multi-threaded Programming: The Java Thread model, the Thread class and Runnable interface. |
| Week 11 | October 1, 2018 | October 8, 2018 | | Creating a Thread using Runnable Interface and extending Thread, Creating Multiple Threads, |
| **MID SEMESTER EXAMINATION (October 11, 2018 to October 17, 2018)** | | | | |
| Week 12 | October 20, 2018 | October 27, 2018 | | Thread Priorities, Synchronizations: Methods, Statements, Inter Thread Communication, Deadlock, Suspending, Resuming and Stopping Threads. |
| Week 13 | October 29, 2018 | November 3, 2018 | | Applet Programming: Introduction, Types of applet, Life Cycle, Incorporating an applet into web page using Applet Tag, running applets, using Graphics class and its methods to draw lines, rectangles, circles, ellipses, arcs and polygons. |
| Week 14 | November 5, 2018 | November 10, 2018 | | Using AWT controls: Introduction to AWT, Creating GUI Applications using AWT, AWT controls: Label, TextBox, TextArea, Check Boxes, Radio Buttons, Choice lists, |
| Week 15 | November 12, 2018 | November 17, 2018 | | Understanding Layout Managers: FlowLayout, BorderLayout, GridLayout; Introduction to Event handling using Delegation Event Model. Introduction to |
| Week 16 | November 19, 2018 | November 22, 2018 | | Java Database Connectivity (JDBC): JDBC Architecture, JDBC Drivers, Java.SQL package, Connecting to the Database and performing basic database operation like Insert, Delete, Update and Select. |
| Week 17 | November 26, 2018 | December 1, 2018 | | I/O Basics: streams, the predefined streams; Reading console Input, Writing console Output |