**Lesson Plan**

**Discipline :** Computer Engineering

**Semester :** 5th

**Subject :** Essential of IT

**Lesson Plan Duration:** 15 weeks

Work Load (Lectutre/Practical) per week (in hours): **Lectures 03 hours**

|  |  |  |
| --- | --- | --- |
| **Week** | **Theory** | |
| **Lecture Day** |  |
| 1st | 1 | Importance and features of Java, Concepts of Java Virtual machine (JVM), Keywords |
| 2 | Constants, Variables and data types, operators and expressions |
| 3 | Control statements, Conditional statements, loops and iterations. |
| 2nd | 4 | Class definition, adding variables and methods, creating objects |
| 5 | constructors, defining methods, calling methods, method overloading. |
| 6 | Creating an array, one and two dimensional array, string array |
| 3rd | 7 | Methods String and String Buffer classes, Wrapper classes |
| 8 | Packages and Interfaces |
| 9 | Exception handling |
| 4th | 10 | Swing |
| 11 | Applet, Icons and Labels |
| 12 | Text Fields, Buttons |
| 5th | 13 | Button Class, Check Box |
| 14 | Queries |
| 15 | Radio Buttons, The Container |
| 6th | 16 | Panel, Windows, and Frame Classes |
| 17 | Combo Box, Tabbed Panes |
| 18 | Scroll Panes, Trees, Tables |
| **7th** | **Minor test** |
| 8th | 19 | Introduction to Servlets, Life cycle of Servlets |
| 20 | Creating, Compiling and running servlet |
| 21 | Reading the servlet Parameters, Reading Initialization parameter |
| 9th | 22 | Packages- javax.servlet Package |
| 23 | Handling HTTP Request and Response (GET / POST Request |
| 24 | Cookies and Session Tracking |
| 10th | 25 | Queries |
| 26 | **Advance Java:** Collection, list, Map |
| 27 | Tree, Hashing |
| 11th | 28 | JDBC Fundamentals |
| 29 | Establishing Connectivity and working with connection interface |
| 30 | working with statements |
| 12th | 31 | Creating and Executing SQL statements |
| 32 | working with Result Set Object |
| 33 | Queries |
| 13th | 34 | Result Set Meta Data |
| 35 | Revision Unit 1 |
| 36 | Revision Unit 2 |
| **14th** | **Minor test** |  |
| 15th | 37 | Revision Unit 3 |
| 38 | Revision Unit 4 |
| 39 | Queries |