

Training Syllabus (Java)

Lecture wise

Foundation of 'C'

L.N.	Contents	Hours
1	1) Introduction of programming 2) Translator 3) Introduction of 'C' 4) History of 'C' 5) C tokens <ol style="list-style-type: none"> a. Keywords b. Identifiers c. Variables/Constant d. Data types e. Operators f. Function g. Header Files 	2
2	1) Decision making statements <ol style="list-style-type: none"> a. If <ol style="list-style-type: none"> i. Simple if ii. Else if iii. Nested if iv. Else if ladder b. Switch case c. Goto 2) Looping statements / Iterative statements <ol style="list-style-type: none"> a. While loop b. For loop c. Do while loop 	2
3	1) Array <ol style="list-style-type: none"> a. Single Dimensional Arrays b. Double Dimensional Arrays 2) String <ol style="list-style-type: none"> a. String Handling b. String Function 	2

4	<ol style="list-style-type: none"> 1) Function <ol style="list-style-type: none"> a. Built in/Library Functions b. User Define Functions <ol style="list-style-type: none"> i. Declaring a function ii. Defining a function <ol style="list-style-type: none"> 1. No Return, No Parameter 2. Return, No Parameter 3. No Return, Parameter 4. Return, Parameter iii. Calling a function 	2
5	<ol style="list-style-type: none"> 1) Recursion 2) Type Casting 3) Scope of variable <ol style="list-style-type: none"> a. Local variable b. Global variable 4) Storage Classes <ol style="list-style-type: none"> a. Automatic b. Register c. Static d. External 	2
6	<ol style="list-style-type: none"> 1) Preprocessors <ol style="list-style-type: none"> a. File inclusion (#include) b. Macro Expansion (#define) 2) Header files <ol style="list-style-type: none"> a. Built in/Library header Files b. User Define header file <ol style="list-style-type: none"> i. Creating user define header file ii. Using user define header file 	2
7	<ol style="list-style-type: none"> 1) Problem Solving & Recovery Session 2) Test 	2

Foundation of 'HTML & CSS'

L.N.	Content	Hours
8	<ol style="list-style-type: none"> 1) Introduction of Web pages 2) Introduction of Websites 3) Introduction of Web Browsers 4) Introduction of HTML <ol style="list-style-type: none"> a. What is Hypertext? b. What is Markup language 	2

	<p>5) History of HTML 6) How to use HTML to create web pages? 7) What is tag? 8) What is element? 9) HTML tag 10) Head tag</p> <ol style="list-style-type: none"> a. Title tag b. Style tag c. Script tag d. Noscript tag e. Link tag f. Meta tag g. Base tag <p>11) Body tag 12) Attributes</p>	
9	<p>1) Text Editing tags</p> <ol style="list-style-type: none"> a. H1, h2, h3, h4, h5, h6, p, pre, center, br, hr, b, strong, i, em, u, ins, s, strike, del, sup, sub, big, small <p>2) Lists</p> <ol style="list-style-type: none"> a. Ordered List (ol, li) b. Unordered list (ul, li) c. Definition list (dl, dt, dd) <p>3) Table (table, tr, th, td, thead, tbody, tfoot) 4) Marquee (marquee) 5) Image (img) 6) Hyperlink (a)</p>	2
10	<p>1) Form</p> <ol style="list-style-type: none"> a. input (type=text, number, date, email, password, url, range, button, submit, reset, radio, checkbox) b. textarea c. label d. fieldset e. legend f. select g. option h. optgroup i. button j. datalist 	2
11	<p>1) div 2) span 3) iframe 4) video 5) audio 6) Introduction of CSS</p>	2

	<ul style="list-style-type: none"> 7) Selectors 8) Properties & values 9) Text Styling Properties <ul style="list-style-type: none"> a. Font-family b. Font-size c. Font-weight d. Text-decoration e. Text-transform f. Color g. Line-height h. Word-spacing i. Text-shadow j. Text-align 	
12	<ul style="list-style-type: none"> 1) Box Modal Properties <ul style="list-style-type: none"> a. Width b. Height c. Padding d. Margin e. Border f. Box-shadow g. Border-radius h. Float i. Outline 2) Background <ul style="list-style-type: none"> a. Background-color b. Background-image c. Background-repeat d. Background-size e. Background-position f. Background-attachment g. Background (rgba) 3) List (list-style-type, list-style-image) 4) Table (border, border-collapse) 	2
13	<ul style="list-style-type: none"> 1) Position 2) Z-index 3) opacity 4) Pseudo-classes <ul style="list-style-type: none"> a. Hover b. Focus c. Active d. Visited e. Link f. Disabled g. Enabled 	2

	<ul style="list-style-type: none"> h. First-child i. Last-child j. Nth-child (odd,even,2n+1,1) 5) Designing a simple menu 6) Designing a menu have sub menu	
14	1) Designing a simple home page of a website 2) Designing a Registration page of a website 3) Designing a login page of a website	2
15	1) Problem Solving & Recovery Class 2) Test	2

Foundation of 'JavaScript'

L.N.	Content	Hours
16	1) Introduction of Scripting language 2) Difference between Client & Server Side Scripting 3) Introduction of JavaScript 4) JavaScript Tokens <ul style="list-style-type: none"> a. Keywords b. Identifiers c. Variables d. Data types e. Operators f. Variable declaration 5) Document object Modal 6) Write & writeln & message (alert) box 7) Events 8) DOM traversing	2
17	1) Conditional Statements (if, else if, nested if, else if ladder) 2) Looping Statements (while, for, do while) 3) Arrays 4) Objects 5) Functions 6) Call function on events	2
18	1) Dialog boxes <ul style="list-style-type: none"> a. Alert Box b. Confirm Box c. Prompt Box 2) String Functions 3) Number Functions	2

	4) Math's Functions 5) Date Functions	
19	1) Creating a Simple Slider 2) Form validation using JavaScript (using regular expression)	2
20	1) Problem Solving & Recovery Class 2) Test	

Foundation of 'Database'

L.N.	Content	Hours
21	1) Introduction of database 2) Introduction of DBMS / RDBMS 3) Introduction of SQL (Structured Query Language) 4) Introduction of DDL commands 5) Introduction of DML commands 6) Introduction of DCL commands	2
22	1) Create Command a. Create Database b. Create table 2) Drop Command a. Drop database b. Drop table 3) Truncate Command a. Truncate table 4) Alter Command a. Modify table column b. Drop Table column c. Add new column into table 5) Insert Command a. Insert single record into table b. Insert multiple records into table	2
23	1) Select Command a. Select all columns from table b. Select specific columns from table c. Select using where clause 2) Update Command a. Update all records of table	2

	<ul style="list-style-type: none"> b. Update single record of table using where clause 3) Delete Command <ul style="list-style-type: none"> a. Delete all records from table b. Delete single multiple records from table using where clause 4) Keys <ul style="list-style-type: none"> a. Unique Key b. Primary Key c. Foreign key 5) Not Null 6) Default 7) Auto Increment 	
24	<ul style="list-style-type: none"> 1) AND & OR Operators 2) Order By (Ascending or Descending Orders) 3) Top or Limit 4) Like 5) Distinct 6) Between 7) Joins <ul style="list-style-type: none"> a. Inner join b. Left Join c. Right Join d. Full Join 	2
25	<ul style="list-style-type: none"> 1) SQL Aggregate Functions <ul style="list-style-type: none"> a. Avg() b. Count() c. Min() d. Max() e. Sum() f. Now() 2) Problem Solving & Recovery Class 3) Test 	2

Foundation of 'Core Java'

L.N.	Content	Hours
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26	<ol style="list-style-type: none"> 1) Introduction of Java 2) History of Java 3) Introduction of JVM 4) Environment Setup for Java in Windows OS 5) Basic Syntax of Java Programming Language 6) Run First Java Program 7) Java Tokens <ol style="list-style-type: none"> a. Keywords b. Identifiers c. Variables d. Data types e. Operators 8) Introduction of OOPs 9) Basic Concept of OPPs with its Properties 10) Java Input/Outputs 	2
27	<ol style="list-style-type: none"> 1) Decision Making Statements <ol style="list-style-type: none"> a. If Statement b. If...Else Statement c. If...Else...If...Else Statement d. Nested if Else Statement e. Switch Statement f. Ternary Operator (Condition?True:False) 2) Looping Statement <ol style="list-style-type: none"> a. While Loop b. For Loop c. Do While Loop d. Break Statement e. Continue Statement 3) Type Conversion 	2
28	<ol style="list-style-type: none"> 1) Arrays <ol style="list-style-type: none"> a. Single Dimensional Array b. Double Dimensional Array 2) For each loop 3) String 4) Object 5) Classes 6) Constructor 7) Member Variables 8) Member Functions 9) Create Instance/Object of Class 10) User Class Members 	2

29	1) Modifiers <ul style="list-style-type: none"> a. Access Modifiers <ul style="list-style-type: none"> i. Public ii. Private iii. Protected b. Static c. Final d. Abstract 2) This Keywords 3) Polymorphism <ul style="list-style-type: none"> a. Method Overloading b. Method Overriding 	2
30	1) Inheritance <ul style="list-style-type: none"> a. Type of Inheritance <ul style="list-style-type: none"> i. Single Inheritance ii. Multilevel Inheritance iii. Hierarchical Inheritance iv. Multiple Inheritance v. Hybrid Inheritance b. Extend keyword 	2

Foundation of 'JSP'

L.N.	Content	Hours
31	1) Introduction of Java Server Pages 2) Introduction of Server Side Scripting language 3) Overview of JSP 4) Installation of JSP 5) Syntax 6) Input/ Output 7) Data types 8) Variables 9) Constant	2

32	<ol style="list-style-type: none"> 1) Decision Making Statements <ol style="list-style-type: none"> a. If else statement b. Else if statement c. Switch case statement 2) Looping Statement <ol style="list-style-type: none"> a. While loop b. Do-while loop c. For loop d. Foreach loop 	2
33	<ol style="list-style-type: none"> 1. Form Handling 2. Form Requesting 3. Form Data Collection 4. Post and Get Method 5. JSP Directives 6. Collecting Data from Text Box 7. Collecting Data from Dropdown List 8. Collecting Data from Check Box 9. Collecting Data from Radio Button 	2
34	<ol style="list-style-type: none"> 1) Database Connectivity 2) JDBC 3) JDBC Driver Class 4) SQL Connection 5) SQL Statement 6) Database Insert Operation 7) Database Update Operation 8) Database Delete Operation 	2
35	<ol style="list-style-type: none"> 1) File Uploading with validation 2) Database Select Operation 3) Data Edit and Update 	2
36	<ol style="list-style-type: none"> 1) User Registration 2) Save user registration data into MySql database 3) Show registered users data 4) Delete registered users 5) Edit registered users 	2
37	<ol style="list-style-type: none"> 1) Include Directive 2) User Login 3) Cookies 4) Sessions 	2

38	1) Date & Time 2) JSP AJAX 3) Server Side Form Validation 4) User Authentication (Login and Logout)	2
39	1) Problem Solving & Recovery Class 2) Test 3) Project Allotment 4) Divide Team & Project Coordinators	2
40-44	Project Development (Complete All Project Modules)	2
45	Project Testing & Submission	2