

**Dr. A. G. D. Bendale Mahila Mahavidyalaya, Jalgaon  
Department of Computer Science**

**Advance Diploma in Web Designing**

**Paper – I**

**Java Programming**

<b>1. Java Basics</b>	<b>10L, 10M</b>
Data types, Variables, Scope of variables, Constant, Operators, Statements, Exception Handling, Multithreading	
<b>2. Objects and Classes</b>	<b>10L, 10M</b>
Introduction- Classes, Objects, Data members, Methods, Use of existing classes, Packages	
<b>3. Distributed Computing</b>	<b>15L, 20M</b>
Remote Method Invocation, Distributed garbage collection, RMI, IIOP, Interface Definition Language, CORBA, JINI, JSP	
<b>4. Graphics Programming</b>	<b>10L, 10M</b>
Introduction, Frames, Frame layouts, Displaying information in a frame, Graphics objects and paint components method, Text and Fonts, Colors, Drawing Shapes, Filling Shapes, Paint mode and Images	
<b>5. Event Handling</b>	<b>15L, 20M</b>
Basic event handling, The AWT hierarchy, low level events – Focus, window, keyboard, mouse events, Multicasting, Event sources and listener, adapter classes	
<b>6. Collections</b>	<b>15L, 15M</b>
Introduction to the collection framework, Collection classes: Set, List, Queue and Map Set: HashSet, TreeSet, and LinkedHashSet	
<b>7. Streams and Files</b>	<b>15L, 15M</b>
Streams, The complete stream family – Layering stream files, Data stream, random access file stream, Putting stream to use – writing delimited output, and delimited input, Object streams	

**References**

1. Core Java Volume – 1 Fundamentals – By: Cay's Horstmann and Gary Cornell
2. The complete reference JAVA-2 Fifth Edition By: Herbert Schildt(TMH)
3. Programming in Java By: E Balguruswamy

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**Paper – II**  
**Web Development and PHP**

**8. Introduction to Web techniques** **10L, 15M**

Introduction to web server and web browser, Domain Name System, URL, HTTP, HTML, Working with HTML forms

**9. The Basics of PHP** **20L, 20M**

Overview of PHP, Data types, Variables, Constants, Operators, Arrays, Conditional statements, Iterations, Functions, Regular Expression

**10. Introduction to Object Oriented Programming** **15L, 15M**

Classes, Objects, accessing methods and properties, Introspection, Serialization, Inheritance, Interfaces, Object cloning, Encapsulation

**11. Using XML** **15L, 15M**

Introduction to XML, Use of XML, Comparison between XML and HTML, CSS, XSL, Working with XML using PHP

**12. Advanced Technique** **20L, 20M**

Introduction to Cookies, Creating cookies using PHP, Automatic login, Introduction to sessions, PHP session management rules, storing, retrieving and deleting data from session variables

**13. Web Techniques** **10L, 15M**

Variables, Server information, Processing forms, Setting response headers, Maintaining state, SSL

**References**

4. Programming PHP- Ramson Lerdorf and Kevin Tatroe, O'Reilly publication
5. Beginning PHP 5.1- Wrox publication
6. PHP web services- Wrox publication
7. AJAX Black Book- Kogent solution

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**Paper – III**  
**Practicals**

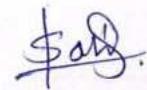
**Total Hours : 120H**

**Lab Course on Java Programming**

- 1) Implement the concept of Exception handling using different program.
- 2) Implement the concept of multithreading using different programs.
- 3) Write a Java program that demonstrates JSP.
- 4) Write a Java program to change text font and color.
- 5) Implement the concept of event handling using different programs.
- 6) Write different Java programs that implements
  - a) ArrayList
  - b) Set
  - c) HashSet
  - d) Map
  - e) TreeSet
  - f) Linked HashSet
  - g) Queue

**Lab Course on PHP**

- 1) Design web pages to demonstrate HTML elements.
- 2) Write a Program to sort array.
- 3) Design XML application that will be displayed using
  - a) CSS
  - b) XSL
- 4) Write a PHP script to store, retrieve and delete data using session variables.
- 5) Implement PHP script that demonstrates Inheritance.
- 6) Implement PHP script that demonstrates Object Cloning.



**Head**

Department of Computer Science  
Dr. Annasaheb G.D. Bendale  
Mahila Mahavidyalaya, Jalgaon