



# **KONGU ARTS AND SCIENCE COLLEGE**

**(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore)**

**ERODE – 638 107**

**PROGRAM NAME**

**M.Com. (CA)**



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**2018-2019**



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# **SYLLABUS**

Sem.	Course Code	CORE PAPER XVI: JAVA PROGRAMMING	Total Marks: 100		Hours Per Week	Credits
			CIA: 25	ESE: 75	4	4
IV	17PBBCT403					

**Objective:** To enable the students for Application Oriented Programming using Java and to upgrade them in developing net based business applications

**Course Outcome (CO):** On successful completion of the course, the students will

CO1: Remember the design and concept of java programming.

CO2: Understand the decision making in java programmes.

CO3: Apply the various dimensional arrays and interfaces in programming.

CO4: Analyze the use of thread concept and its methods.

CO5: Evaluate the applet programming and file handling.

#### Unit I

Introduction to Java - Java Program Structure – Java Tokens – Java Statements – Implementing Java Program – Command Line Arguments - Constants – Variables – Data types – Type Casting – Operators : Arithmetic – Relational – Logical – Assignment – Increment – Decrement – Conditional – Bitwise – Special.

#### Unit II

Decision Making and Branching statements – Decision Making and Looping Statements – Classes, Objects and Methods : Defining a Class – Adding Variables – Adding Methods – Creating Objects – Accessing Class Members – Constructors – Method Overloading – Inheritance - Overriding of Methods – Final Variables, Methods and Class – Abstract Methods and Class – Visibility Control : Public – Friendly – Protected – Private (Simple Concepts).

#### Unit III

Arrays: One-Dimensional Array – Two-Dimensional Array – String : String Arrays – String Methods –String Buffer Class - Interfaces (Multiple Inheritance): Defining Interfaces – Extending Interfaces –Implementing Interface – Packages : System Packages – Using System Packages – Creating, Accessing and Using a Package – Adding a Class to a Package – Hiding Classes.

#### Unit IV

Multithreaded Programming: Creating Threads – Extending the Thread Class – Stopping and Blocking Thread – Life Cycle of a Thread – Using Thread Methods – Implementing the



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'Runnable' Interface (Simple Concepts). Managing Errors and Exceptions: Types of Errors – Exceptions – Syntax of Exception Handling Code.

#### Unit V

Applet Programming : Applets – Difference between Applet and Application Preparing to Write Applets – Building Applet Code – Applet Life Cycle – Creating Executable Applet – Applet Tag – Adding Applet to HTML File – Running the Applet – Aligning the Display – Getting Input from User – Managing Input/Output Files in Java: Stream Concept – Stream Classes – Other I/O Classes – Creating Files – Reading/Writing Characters, Bytes. (Only Simple Concepts).

#### Text Book:

- Balagurusamy E, Programming with Java -A Primer, Tata McGraw Hill Publishing Company Ltd, New Delhi , 2014.

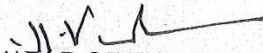
#### Books for Reference:

1. Liang, Introduction to Java Programming, London: Pearson Publishing House, 2013.
2. Cay S. Horstmann, Core Java - Volume I, Pearson Publishing House, London, 2013.
3. James Keogh, Jim Keogh, J2EE: The Complete Reference, McGraw-Hill/Osborne, Seventh Edition, 2002.
4. Bruce W.Perry, Java Servlet and JSP Cookbook, O'Reilly, First Edition, 2004.

QUESTION PAPER PATTERN		
SECTION - A	SECTION - B	SECTION - C
10 x 1 = 10 Marks (Multiple Choice, Four options) Two questions from each unit	5 x 7 = 35 Marks (Either or choice) Two questions from each unit	3 x 10 = 30 Marks (Answer any three Questions) One Question from each unit



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Sem.	Course Code	CORE PAPER XVII: COMPUTER APPLICATIONS IN BUSINESS: PRACTICAL-IV (JAVA PROGRAMMING)	Total Marks: 100		Hours Per Week	Credits
			CIA: 40	ESE: 60		
IV	17PBBCP404				6	4

**Objective:** To develop the Business Applications Oriented Programme relating to Multi-threading, Multiple Inheritance and Applet Viewer Programmes.

**Course Outcome (CO):** On successful completion of the course, the students will

CO1: Remember the basic concepts of the Java programming.

CO2: Understand the knowledge of creating own business application packages.

CO3: Implement the programs for generating a solution in real life problems.

CO4: Interpret the concepts to produce output.

CO5: Figure out the results in risky tasks.

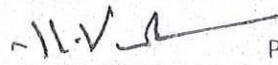
**Programmes:**

1. Program to generate a Pascal Triangle.
2. Program for roots of a Quadratic Equation.
3. Program for merging two sorted arrays.
4. Program for counting letter frequencies in a given string.
5. Program for Multithreading
6. Program for preparing mark list using inheritance.
7. Program for Multiple inheritance.
8. Program for creating your own package.
9. Program that counts the number of lines, words and characters in a given text file.
10. Program that right-justifies a text file.
11. Program that display a digital clock using applet.
12. Program that generates a human face using applet.
13. Create an applet containing three buttons labeled red, green and blue. Depending on the button pressed, the background color of the applet should change.

ESE Practical Examination Pattern					
Program 1	30 Marks	Program 2	25 Marks	Record	5 Marks



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