

**KGISL Institute of Technology**  
**Department of Information Technology**  
**Lesson Plan (Micro Level)**

Faculty Name:	Rajasekaran S	Designation:	Assistant Professor
Course Name:	OBJECT ORIENTED PROGRAMMING	Course Code:	CS8382
Academic Year	2018-2019	Sem/Year	III/II

**COURSE OUTCOME:**

*At the end of course the student should be able to:*

**CO1:** To understand Object Oriented Programming concepts and basic characteristics of Java

**CO2:** To know the principles of packages, inheritance and interfaces

**CO3:** To define exceptions and use I/O streams

**CO4:** To develop a java application with threads and generics classes

**CO5:** To design and build simple Graphical User Interfaces

Unit I- Introduction to OOP and Java Fundamentals								
Topics		Planned Date	Mode of Teaching	Reference	Course Outcome	Actual Date	Day order/ Hour	Remarks
1	Object Oriented Programming, Objects and Classes	05/07/2018	PPT	T1, T2	CO1			
2	Abstraction, Encapsulation, Inheritance, Polymorphism	06/07/2018	PPT	T1, T2	CO1			
3	OOP in Java , Characteristics of Java	09/07/2018	PPT	T1, T2	CO1			
4	The Java Environment , Java Source File, Structure , Compilation, Opensource Software(CBS1)	11/07/2018	PPT	T1, T2	CO1			
5	Fundamental Programming Structures in Java,	11/07/2018	C&B	T1, T2	CO1			
6	Defining classes in Java, Constructors, Methods.	12/07/2018	C&B	T1, T2	CO1			
7	Access specifiers, Static members, Comments.	13/07/2018	C&B	T1, T2	CO1			
8	Data Types, Variables, Operators.	14/07/2018	PPT	T1, T2	CO1			
9	Control Flow, Arrays.	16/07/2018	C&B	T1, T2	CO1			
10	Packages - JavaDoc comments.	18/07/2016	PPT	T1, T2	CO1			
Total No. of Hours prescribed per Unit by Anna University				10				
Total No. of Hours Required as per Lesson Plan				10				
Signature of Faculty			Signature of HOD					

Unit II – Inheritance and Interfaces								
Topics		Planned Date	Mode of Teaching	Reference	Course Outcome	Actual Date	Day order/ Hour	Remarks
1	Inheritance, Super classes, Sub classes	19/07/2018	PPT	T1, T2	CO2			
2	Protected members, Constructors in sub classes	20/07/2018	C&B	T1, T2	CO2			
3	The Object class	23/07/2018	PPT	T1, T2	CO2			
4	Abstract classes and methods, Interfaces	25/07/2018	C&B	T1, T2	CO2			
5	Defining an interface, Implementing interface, differences between classes and interfaces	25/07/2018	PPT	T1, T2	CO2			
6	Differences between classes and interfaces	26/07/2018	PPT	T1, T2	CO2			
7	Extending interfaces, Object cloning	27/07/2018	C&B	T1, T2	CO2			
8	Inner classes	07/08/2018	PPT	T1, T2	CO2			
9	ArrayLists	08/08/2018	C&B	T1, T2	CO2			
10	Strings	10/08/2018	PPT	T1, T2	CO2			
Total No. of Hours prescribed per Unit by Anna University				9				
Total No. of Hours Required as per Lesson Plan				10				
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Unit III – Exception Handling and I/O								
Topics		Planned Date	Mode of Teaching	Reference	Course Outcome	Actual Date	Day order/ Hour	Remarks
1	Exceptions, Exception hierarchy	11/08/2018	PPT	T1, T2	CO3			
2	Throwing and catching exceptions	13/08/2018	C&B	T1, T2	CO3			
3	Built-in exceptions	14/08/2018	PPT	T1, T2	CO3			
4	Creating own exceptions	16/08/2018	C&B	T1, T2	CO3			
5	Stack Trace Elements	18/08/2018	PPT	T1, T2	CO3			
6	Input / Output Basics – Streams	18/08/2018	C&B	T1, T2	CO3			
7	Byte streams and Character streams	20/08/2018	PPT	T1, T2	CO3			
8	Reading and Writing Console	21/08/2018	PPT	T1, T2	CO3			
9	Reading and Writing Files	23/08/2018	C&B	T1, T2	CO3			
Total No. of Hours prescribed per Unit by Anna University				9				
Total No. of Hours Required as per Lesson Plan				9				
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Unit IV – Multithreading and Generic Programming								
Topics		Planned Date	Mode of Teaching	Reference	Course Outcome	Actual Date	Day order/ Hour	Remarks
1	Differences between multi-threading and multitasking	24/08/2018	PPT	T1, T2	CO4			
2	Thread life cycle, creating threads	28/08/2018	C&B	T1, T2	CO4			
3	Synchronizing threads	28/08/2018	PPT	T1, T2	CO4			
4	Inter-thread communication	29/08/2018	C&B	T1, T2	CO4			
5	Daemon threads, thread groups	30/08/2018	PPT	T1, T2	CO4			
6	Generic Programming, Generic classes	31/08/2018	C&B	T1, T2	CO4			
7	Generic methods, Bounded Types	08/09/2018	C&B	T1, T2	CO4			
8	Restrictions and Limitations	10/09/2018	PPT	T1, T2	CO4			
Total No. of Hours prescribed per Unit by Anna University				8				
Total No. of Hours Required as per Lesson Plan				8				
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Unit V – Event Driven Programming								
Topics		Planned Date	Mode of Teaching	Reference	Course Outcome	Actual Date	Day order/ Hour	Remarks
1	Graphics programming , Frame	12/09/2018	C&B	T1, T2	CO5			
2	Components	12/09/2018	PPT	T1, T2	CO5			
3	Working with 2D shapes	24/09/2018	C&B	T1, T2	CO5			
4	Using color, fonts, and images	25/09/2018	PPT	T1, T2	CO5			
5	Basics of event handling, Event handlers, Threaded GUI(CBS2)	26/09/2018	C&B	T1, T2	CO5			
6	Adapter classes , Actions, Mouse events	27/09/2018	PPT	T1, T2	CO5			
7	AWT event hierarchy, Introduction to Swing	03/10/2018	C&B	T1, T2	CO5			
8	Layout management, Swing Components	04/10/2018	PPT	T1, T2	CO5			
9	Text Fields , Text Areas, Buttons	05/10/2018	PPT	T1, T2	CO5			
10	Check Boxes, Radio Buttons, Lists, Choices	06/10/2018	PPT	T1, T2	CO5			
11	Scrollbars, Windows, Menus, Dialog Boxes.	08/10/2018	PPT	T1, T2	CO5			
Total No. of Hours prescribed per Unit by Anna University				9				
Total No. of Hours Required as per Lesson Plan				11				
Signature of Faculty			Signature of HOD					

#### TEXT BOOKS:

- T1** Cay S. Horstmann, Gary cornell, “Core Java Volume - I Fundamentals”, 9 th Edition, Prentice Hall, 2013.  
**T2** Herbert Schildt, “Java The complete reference”, 8 th Edition, McGraw Hill Education, 2011.

#### REFERENCE BOOKS:

- R1** Paul Deitel, Harvey Deitel, “Java SE 8 for programmers”, 3 rd Edition, Pearson, 2015.  
**R2** Steven Holzner, “Java 2 Black book”, Dreamtech press, 2011.  
**R3** Timothy Budd, “Understanding Object-oriented programming with Java”, Updated Edition, Pearson Education, 2000.

#### WEB REFERENCES:

- W1** <https://docs.oracle.com/javase/7/docs/api>  
**W2** <https://www.journaldev.com/7153/core-java-tutorial>  
**W3** <https://www.tutorialspoint.com/java/index.htm>

**MODE OF TEACHING:****C&B** Chalk and Board**PPT** Power Point**VC** Video Clipping**CONTENT BEYOND SYLLABUS (CBS):****1** Opensource Software**2** Threaded GUI**Total No. of Hours prescribed by Anna University for Completion of the Course** **45****Total No. of Hours Required as per Lesson Plan to complete the Course** **48**No. of Hours Required for covering Content Beyond Syllabus **2****Total No. of Lecture Hours for Completion of the Course** **46****Prepared By**

Name: Rajasekaran S

Designation: Assistant Professor

Signature:

**Approved By**

Name: Dr.Vijaya G

Designation: Professor &amp; Head IT

Signature: