

GUJARAT UNIVERSITY

BCA IV SYLLABUS

COURSE TITLE	CORE JAVA
COURSE CODE	CC-210
COURSE CREDIT	3
Session Per Week	4
Total Teaching Hours	40 HOURS

AIM

To develop the skill about the basic knowledge of java programming language with oop concepts and provide know about platform independent concept.
 To provide knowledge of interface exception handling,threading, package and applet details through java.

LEARNING OUTCOMES

- On the completion of the course students will:
- 1.Understand the java programming and oop concepts.
 - 2.Understand the concepts of Inteface, exception handling, threading, and package.
 - 3.Understand the basic concepts of applet.

DETAIL SYLLABUS

UNIT	TOPIC / SUB TOPIC	TEACHING HOURS
	Java Introduction	10
1	<ul style="list-style-type: none"> { W Ć] v] % o • } (K i š } Ć] v š o v P μ P { : Ā •• v š] o • { : Ā s] Ć š μ o D Z] v { : Ā & š μ Ć • { W Ć } P Ć u ^ š Ć μ š μ Ć { : Ā / u % Ć } Ā u v š • {] ((Ć v š Ā v : Ā v == { / v • š o o š] } v } (: < í X ó { / v š P Ć š Ā o } % u v š Ā] Ć } v u v š 	3
	<ul style="list-style-type: none"> { : Ā W Ć } P Ć u u] v P } v • š Ć μ š • o Variables o Primitive Data Types o Identifier o Literals o Operators o Expressions o Precedence Rules and Associativity o Primitive type conversion and casting o Flow of Control 	4

	<ul style="list-style-type: none"> o Class, Objects, Class declaration in java, Creating Objects o Methods, Constructors, Cleaning Up Unused Objects 	3
2	<p>Array, Inheritance and Interface</p> <ul style="list-style-type: none"> o Class Variable and Methods - Static Keyword o this keyword o One dimensional, Two dimensional o Using For..each with array o Passing arrays to methods and returning arrays from method 	10
	<ul style="list-style-type: none"> o Deriving classes using extends keyword o Overriding Method o super keyword, final keyword o Abstract class 	4
	<ul style="list-style-type: none"> o Variables in Interface o Extending Interfaces o Interface vs Abstract class 	2
3	<p>Package, String and Exception Handling</p> <ul style="list-style-type: none"> o Creating Packages o Using Packages o Access Protection 	10
	<ul style="list-style-type: none"> o Introduction o Exception Handling Techniques o User Defined Exception 	5
	<p>Multithreading and Applet</p>	10
		5

4

• Applet

```

{ /v š Œ } μ š ]}v
{ %o %o o š o ••
{ %o %o o š ^š Œ μ š μ Œ
{ Æ u %o o %o %o o š W Œ } P Œ u
{ %o %o o š >]( Ç o
{ }uu}v u š Z} • μ • ]v ]•%o o Ç]vP š Z }μš %o μš
{ %o ]vš ~•U μ %o š ~• v Œ %o ]vš ~• u š Z} •
{ D}Œ }μš %o %o o š š P
{ D š Z} • }( 'Œ %o Z] • o ••
o drawLine(), drawArc(), fillArc(), drawOval(), fillOval(), drawPolygon(), fillPolygon(),
drawRect(), fillRect(), drawRoundRect(), fillRoundRect()

```

5

TEXT BOOK/S:

Programming in Java
Oxford Publication
By Sachin Malhotra and Saurabh Choudhary

REFERENCE BOOKS:

1. Programming in Java 2
Jaico publishing house
By Dr. K. Somasundaram
2. The Complete Reference Java2
TMH Publication
By Herbert Schildt

WEB RESOURCES:

1. docs.oracle.com/javaee/6/tutorial/doc/girgm.html
2. docs.oracle.com/javaee/6/tutorial/doc/bnagi.htm
3. www.javatpoint.com
4. www.tutorialspoint.com

REQUIRED SOFTWARE/S

1. Any editor of Windows or Linux/UNIX.
2. JVM version 1.8