

Programming in Java

Max Marks : 80

Min Marks : 27

Note : The Question Paper setter is advised to prepare unit-wise question with the provision of internal choice. Only Simple calculators allowed not scientific calculator.

UNIT - I

Introduction: Genesis of java, importance to the Internet, overview of features. **OOP :** OOP features, data types, control structures, arrays, methods and classes, nested & inner classes, string and String Buffer class, Wrapper Class, vectors,

UNIT-II

Operators: Arithmetic Operators, Relational Operators, Logical Operators, Bit wise Operators, Conditional Operators, new operator, [] and instance of operator. Control Statements: Java's Selection statement, Iteration Statement, Jump Statement, Array: Declaring Array variables, Constructing an Array, Initializing an Array, Multidimensional Arrays, Anonymous Arrays.

UNIT - III

Introducing Classes: Class Fundamentals, Declaring Object, Assigning Object Reference Variables, Defining Methods, method overloading, Using objects as parameter, Constructors, Garbage collection, finalize () method. Inheritance: Inheritance basic, method overloading, object reference this and super, Chaining constructor using this () and super (), Member accessibility modifier: public, protected, default accessibility of member, private protected, private.

UNIT - IV

Package: Define package, CLASSPATH, importing package, **Interface:** Define an interface, implementing interface, extending interface, variable in interface, Overview of nested class: Top level nested class and interface, Non static inner class, Local class.

Exception Handling : Fundamental: exception types, using try and catch, throwing exceptions, defined exceptions.

UNIT-V

Multithreaded Programming : Java spread model, creating threads, and thread priorities, synchronization. Suspending resuming and stopping threads. **Input/Output:** Basic Streams, Byte and Character Stream, predefined streams, reading and writing from console and files. Using standard Java Packages (lang,util,io), **JDBC:** Setting the JDBC connectivity with backend database.

BOOKS RECOMMENDED :

1. The Complete Reference Java 2
2. A Programmer Guide to Java
3. Web Enabled Commercial Application Java 2
4. Java Primer
5. Java Programming

- Herbert Schildt, Publisher- TMH
- Khlid A. Mughal, R.W. Rasmussen.
- Ivan Bayross Publisher- B.P.B
- by E.Balaguruswami
- Khalid Mughal

