

## Question Bank (I scheme)

**Name of Subject: Java Programming (JPR)**

**Unit Test: I**

**Subject Code: 22412**

**Course: CM/IF4I**

**Semester: IV**

### **Chapter 1: Basic syntactical constructs in java (10 marks)**

#### **2 Marks**

1. Write all primitive data types available in java with their storage size in bytes
2. Define term class with syntax.
3. Define term token and enlist types of token in java
4. Describe conditional operator in java.
5. Write syntax and example for-each.

#### **4 Marks**

1. Explain any four features of java.
2. Describe concept of type casting and Explain its types with proper syntax and example.
3. State & explain scope of variable with an example.
4. Write a program to accept marks and find grade using if statement.
5. Write a program to accept a character and check whether a character is vowel or consonant using switch-case statement.
6. Write a java program to display all the odd numbers between 1 to 30 using for loop & if statement.
7. Write a program to display number 1 to 50 using do—while loop.

### **Chapter 2: Derived Syntactical Constructs in Java (18 marks)**

#### **2 Marks**

1. Define term constructor with syntax.
2. Define term array with syntax.
3. Describe the concept of garbage collection.
4. State the difference between == ,equals() and compareTo() method.

#### **4 marks**

1. Explain any four method of String with syntax and example.
2. Describe the visibility controls in Java with suitable example.
3. Write a program to implement different types of constructors to perform addition of complex number.
4. Develop a program to print command line argument using for loop.
5. Explain any four method of Vector class with syntax and example.
6. Write a program to find largest number in array.
7. Write a java program to implement following functions of string : (1) Calculate length of string (2) compare between strings (3) Concatenating strings
8. Describe the concept wrapper classes in Java and explain any one wrapper in detail with its methods.

### **Chapter 3: Inheritance, Interface and Package (12 marks)**

#### **2 Marks**

1. Define inheritance and its types.
2. State and use of super keyword.
3. State any two uses of final keyword.
4. Describe concept of package and its syntax.

#### **4 Marks**

1. What is Interface? Describe syntax, feature & need of an interface
2. Write a single program to implement inheritance and polymorphism in java.
3. Develop a program to find area of rectangle and circle using interfaces.
4. Write a program to implement user defined packages in terms of creating a new package and importing the same.
5. Write a java program to extend interface assuming suitable data.
6. Describe concept of multiple inheritances? Write a java program to implement
7. multiple inheritance
8. Develop a program to implement the multilevel inheritance.
9. Explain method overriding with suitable example.
10. Develop a program which consists of the package named let\_me\_calculate with a class named calculator and a method named add to add two integer numbers. Import let\_me\_calculate package in another program (class named Demo) to add two numbers.