

Dr. D. Y. Patil Institute of Technology, Pimpri, Pune

Department of Computer Engineering

QUESTION BANK

210255: PRINCIPLES OF PROGRAMMING LANGUAGES

Unit – 3 Java as Object Oriented Programming Language – Overview

Sr.No	Question Description	PLO* & Level
1	Justify the meaning of each characteristics of java in the statement "java is simple, architecture neutral, portable, interpreted and robust and secured programming language"	PLO1, L1
2	Explain why java is secured, portable and dynamic? Mention the concepts in java that ensures these.	PLO3, L2
3	Explain Java's role in internet. Justify the features of Java	PLO3, L2
4	Distinguish between Java and C Programming	PLO3, L3
5	Distinguish between Java and C ++ Programming	PLO3, L3
6	Explain various operators in java Programming	PLO3, L1
7	Explain the concepts of OOPS and List the Advantages of OOPS over procedure oriented Programming	PLO1, L1
8	Write the key features of Java Programming.	PLO3, L1
9	Write a program in Java to perform the addition of two matrices multidimensional arrays and set the diagonal elements of resultant matrix to 0.	PLO1, L2
10	Write a program in java to perform the addition of two matrices (multi dimensional arrays) and set the diagonal elements of the resultant matrix to 0.	PLO3, L2
11	Write a program in java to read a matrix of 3 * 3 and performs the addition of elements in each row and each column.	PLO3, L2
12	State String class in Java and explain the following methods of String class with example. i. Finding length of a string. ii. Comparing two strings iii. Extracting a character from a string	PLO3, L1
13	List and Explain any 5 string functions with examples	PLO1, L2
14	Define String in Java programming. Explain the following operations of class strings in Java with example. 1. To find the length of a string. 2. To compare two strings 3.Extraction of character from a string	PLO1, L2
15	Write a program to print the area of a circle by creating a class named 'Area' having two methods. First method named as 'setRadius' takes radius of circle as parameter and the second method named as 'getArea' returns the area of the circle. Radius of circle is entered through keyboard.	PLO1, L2
16	List the use of constructors in Java and mention the various types of constructors in Java programming with example	PLO3, L3
17	Define Constructor. Show with the example about overloading of default, parameterized and copy constructor.	PLO3, L3

18	Demonstrate through a program in java , that how constructors can be used for initializing the elements of matrix with '0' in the example of adding two matrices.	PLO3, L3
19	Explain the key word 'this' with example program	PLO1, L3
20	Explain Garbage Collection concept in Java Programming	PLO1, L3
21	Explain the following Java concepts and state the uses with example. 'this' keyword and finalize() method.	PLO1, L3
22	Explain method overloading with example program in Java	PLO1, L3
23	State and show that the way of Objects are passed as arguments and returns objects as value in Java methods	PLO3, L3
24	Write the working of 'Object as parameter' with example in Java.	PLO1, L3
25	Discuss the relative merits and demerits of using protected access Vs. private access in super class	PLO3, L2
26	List and explain various access modifiers in Java programming	PLO3, L2
27	Compare nested and inner classes in Java with examples	PLO3, L3
28	Explain command line arguments and variable length arguments in Java with example	PLO3, L3

* PLO – Program Learning Outcome