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| Reg. No:Date: 5-12-2022 (9am) |



**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27**

**BSc V SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2022**

**(Examination to be conducted in December 2022)**

**CS 5118 - Java Programming**

**Time- 2 1/2 hrs Max Marks-70 This paper contains ONE printed page and three parts**

**I.ANSWER ALL THE QUESTIONS (2\*10=20)**

1. How java is claiming to be platform independent? Explain.
2. Define a Class and an Object.
3. How will you initialize single and multi dimensioanal arrays in java?
4. What is the difference between Concat method and + operator to join strings?
5. What is the use of super keyword?
6. What is the need of abstract class.
7. What is a package in Java?Write a syntax to create package.
8. What are Checked and UnChecked Exception?
9. Describe synchronization in respect to multithreading.
10. Explain any four applet tag.

**II.ANSWER ANY FIVE (6\*5=30)**

1. Write a program to accept number from command line and print square root of the

number.

1. What is a Constructor? Explain types of Constructors in Java? Write a java program to find the Area of Circle using Constructor.
2. Explain the concept of inheritance and its types.
3. What is polymorphism?Write a program of method overriding that illustrate polymorphism
4. Write a java program to implement multiple inheritance.
5. What is thread priority ? Write default priority values and methods to change them.
6. Which are the ways to access package from another package? Explain with example.

**III.ANSWER ANY TWO QUESTIONS (2\*10=20)**

1. A)Explain the features of java (7 Marks)

B)explain the use of ‘this’ keyword in java. (3 Marks)

1. A)Develop an ‘Interest’ interface which contains ‘simpleInterest’ and ‘compInterest’ methods and static final field of Rate 25%. Write a class to implement those methods. (6 Marks)

B) Write the difference between Method overloading and Method Overiding. (4 Marks)

1. A) Write a program to input name and balance of customer and an user defined

 exception if balance less than 1500. (5 Marks)

B)Explain Applet Life Cycle. (5 Marks)