ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE-27
B.Sc - V SEMESTER
END SEMESTER EXAMINATION: NOVEMBER 2020
CS 5118- JAVA PROGRAMMING

Time- 2 1/2 hrs   **Max Marks-70**

This paper contains two printed pages and three parts

PART A

Answer All the Questions.   10 * 2=20

1. Discuss ANY three OOPs principles.
2. Which of these data types is used to store command line arguments?
   a) Array
   b) Stack
   c) String
   d) Integer
3. Which method can be defined only once in a program?
   a) main method
   b) finalize method
   c) static method
   d) private method
4. Explain the meaning of the following terms:
   a) Method overriding b) Wrapper classes
5. Demonstrate the working of nested try blocks with suitable example.
6. Identify and list the errors if any in the following interfaces ? Also fix the errors if found.
   public interface SomethingisWrong {
        void aMethod(int a Value) {
   System.out. println("Hi Mom");
        }
   }
7. Differentiate between: final, finally and finalize.
8. Discuss the various types of access protection policies of packages in JAVA.
9. Which of the following classes can catch all exceptions which cannot be caught?

a) RuntimeException

b) Error

c) Exception

d) ParentException

10. Design an applet to demonstrate the smiley Applet.

PART B

Answer any FIVE.   5*6=30

11. What are the benefits of using packages? Write down the steps in creating your own package.

12. Discuss the criteria's for applying the concept of interface and abstract class in the context of Java programming. Take an appropriate programming example to support your criteria's.

13. Explain the any three thread methods with programming example.

14. Write a program to find the factorial of all the numbers in the range 1-10 using two threads.

15. Write a Java program to find the prime numbers from 1 to 100.

16. Write a Java program to perform simple calculator operation.

17. Explain Life Cycle of an Applet in Java with suitable example.

PART C

Answer any TWO.   2*10=20

18. a)Create a class with one integer instance variable. Initialize the variable using:
    i)Default constructor ii) parameterized constructor.(6 marks)
    b)Discuss some real time examples where method overriding is used. (4 marks)

19. a)Which approach is used to implement multiple inheritances in Java? Explain with an example. (6 marks)

    b)Explain charAt() and substring() methods of string class with examples.(4 marks)

20. what are the uses of exception handling in Java? Write a program using Java that handles an exception " entry of negative age of a person".