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| Reg No  Date:28-02-2022 |



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

**M.Sc- I SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2021**

**(Examination conducted in January-March 2021)**

**CS 7121 - Object Oriented Programming Using Java**

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

**This paper contains two printed page and three parts**

**I.ANSWER ALL THE QUESTIONS(15\*1=15)**

1) Which of the following option leads to the portability and security of Java?

1. Bytecode is executed by JVM
2. The applet makes the Java code secure and portable
3. Use of exception handling
4. Dynamic binding between objects

2) Which of the following is not a Java features?

1. Dynamic
2. Architecture Neutral
3. Use of pointers
4. Object-oriented

3) An interface with no fields or methods is known as a \_\_\_\_\_\_.

1. Runnable Interface
2. Marker Interface
3. Abstract Interface
4. CharSequence Interface

4) How many threads can be executed at a time?

1. Only one thread
2. Multiple threads
3. Only main (main() method) thread
4. Two threads

5) Which of the following is not an OOPS concept?

1. Encapsulation
2. Polymorphism
3. Exception
4. Abstraction

6)Which of the following class cannot be inherited

1. Sealed Class
2. Final Class
3. Abstract Class
4. Base Class

7. Which of the following is correct way of importing an entire package 'pkg'?

1. import pkg.
2. Import pkg.
3. import pkg.\*
4. Import pkg.\*

8. In Java a Thread can be created by

1. Extending Thread Class
2. Implementing Runnable Interface
3. Both
4. None of the Above.

9. Which of these method of class String is used to extract a single character from a String object?

a) CHARAT()  
b) chatat()  
c) charAt()  
d) ChatAt()

10. Which of these is an incorrect statement?

a) String objects are immutable, they cannot be changed  
b) String object can point to some other reference of String variable  
c) StringBuffer class is used to store string in a buffer for later use  
d) None of the mentioned

11. Which of these classes is not part of Java’s collection framework?  
a) Maps  
b) Array  
c) Stack  
d) Queue

12.Which of the following is a super class of all exception type classes?  
a) Catchable  
b) RuntimeExceptions  
c) String  
d) Throwable

13. Which of the following handles the exception when a catch is not used?  
a) finally  
b) throw handler  
c) default handler  
d) java run time system

14.Which class is used to generate random number?  
a) java.lang.Object  
b) java.util.randomNumber  
c) java.util.Random  
d) java.util.Object

15. Which of these can be used to fully abstract a class from its implementation?  
a) Objects  
b) Packages  
c) Interfaces  
d) None of the Mentioned

**II.ANSWER ANY FIVE (5\*5=25)**

16.a)Write a Simple Java Program to Read Input from the Keyboard.

OR

b) Explain Control Statements in Java with an Example Program

17.a)How is an Exception Different from an Error? Explain Array out of Bound Exception with an example Program.

OR

b)Write the Difference between ABSTRACT CLASS and FINAL CLASS.

18.a) Explain the Following in Brief

* 1. Multi Threading
  2. Frameworks
  3. Method Overriding

OR

b) Write a program to any three methods of STRING CLASS.

19.a)Write a GUI Program using swing to create one button and adding it on the JFrame object inside the main() method.

OR

b).What is EVENT listener and Adapter Classes? Explain in Detail .

20.a)Write in detail all the Drivers of JDBC

OR

b).Explain in detail JDBC Architecture.

**III.ANSWER ANY THREE QUESTIONS(3\*10=30)**

21.What are the different types of packages? Explain User Defined Packages with example of your own.

22.a) Discuss Event Handling in JAVA .(5+5 marks )

b) Write a note on the Different Types of Constructor

23. Write a Program to Display the Result of a Student Using Multi Level Inheritance

* Class One- To Receive Inputs
* Class Two- To Process
* Class Three- To Display the Output

24. Write a Database Program in Java to create a STUDENT INFORMATION TABLE with four columns NAME, REGNO, PHONE NO and EMAIL ID