Register Number:

**DATE: 13-04-2019**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |
| --- |
| **col LOGO outline****ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27** |
| **B.C.A – IVSEMESTER** |
| **SEMESTER EXAMINATION: APRIL 2019** |
| **CA 4315- Java Programming** |
| **Time- 2 1/2hrs** |  | **Max Marks-70** |
| PART AAnswer all of the following (2\*10=20) |

 |

1. What is JVM ? Why is Java called the Platform Independent Programming Language?
2. Explain the following line used under Java Program −

public static void main (String args[ ])

1. What is the difference between static and non-static variables?
2. Where are the private variable accessed?
3. **What is the difference between an Abstract Class and Interface in Java?**
4. Explain the available thread states in multithreading.
5. What is default constructor and parameterized constructor ?
6. What is the use of the Try…Catch block with suitable example ?
7. Differentiate between arrays and vectors.
8. Explain the use of FileInputStream class and FileOutputStream class`

PART B

Answer any five of the following (6\*5=30)

1. Write a java program to find the sum of all integer greater than 50 and lesser than 100
2. Write a short note on final class and final method with suitable syntax.
3. Explain method overloading with an example.
4. Why strings are called as immutable? Mention any three string operations
5. Explain life cycle of an applet with a neat diagram.
6. Give the steps to create and use java package with a suitable example
7. Discuss the role synchronization in multithreading explain with suitable example

PART C

Answer any two of the following (10\*2=20)

1. Explain in detail the concept used to implement multiple-inheritance in java with a suitable example
2. write a short note on
	1. Wrapper class
	2. Visibility control in Java.
3. Explain how to create and use applet in java using suitable program example.

CA4315\_A\_19