Seat No.

M. Sc. (Sem. II) (CBCS) (Statistics) Examination May / June - 2015

STAT. CST: 2004: Java Programming

Faculty Code: 003 Subject Code: 017204

Time :  $2\frac{1}{2}$  Hours] [Total Marks: 70

I. Java was introduce in the year?

Attempt the following (Any Seven)

- a. 1995
- c. 1991
- b. 1992

Q-1

- d. 1994
- II. What is the output of the given code? class Modulus { public static void main(String args[]) { int x = 42: double y = 42.25; System.out.println("x mod 10 = " + x % 10); a. 2 c. 10
  - **b**. 4 d. 8
- III. What is the general form of 'If' statement?
  - a. if(Condition) Statement;
  - b. if(Statement) Condition;
  - c. if(Statement) Condition
  - d. if(Statement, Condition);
- IV. Which primitive type have this range '-32,768 to 32,767'?
  - a. Int
- b. Short
- c. Double d. float

```
V.
      class CharDemo2 {
      public static void main(String args[]) {
              char ch1;
              ch1 = 'X';
              System.out.println("ch1" + ch1);
              ch1++; // increment ch1
              System.out.println("ch1 is now " + ch1);
      What is the output of this program?
          a. X,Y
                    b. X,X
                                          c. Y,X d. Y,Y
```

(14)

```
VI.
       class DynInit
                public static void main(String args[])
                         double a = 3.0, b = 4.0;
                         double c = Math.sqrt(a * a + b * b);
                         System.out.println("Hypotenuse is " + c);
         Give the output of this program.
                                      10
                                                                     d. 5
                                                    c. Error
VII.
         '^='this operator is called as?
             a. Bitwise unary NOT
                                                    c. Bitwise exclusive OR
             b. Bitwise AND assignment d. Bitwise exclusive OR assignment
VIII.
         A).
                 A constructor initializes an object immediately upon creation
         B).
                 It has the same name as the class in which it resides and is syntactically similar
                 to a method.
             a. A). is true B). Is wrong
                                                        Both are false.
                                                    C.
             b. Both are true
                                                        None of the above
 IX.
         What is the general form of 'for' loop statement?
             a. for(x = 0; x < 10; x = x + 1)
             b. for(x = 0; x < 10; x++)
             c. Both
             d. None of them
  X.
        '?' this operator is which type of operator?
             a. Boolean
                                  c. Relational
             b. Assignment
                                           d. Ternary
Q-2 Answer the following questions (Any Two)
                                                                                           (14)
(A) Describe the History of JAVA
(B) Describe Garbage Collection and finalize method of java.
(C) Write a program of Chi-Square Test
(D) Explain the buzzword of JAVA
Q-3 Answer the following questions
                                                                                           (14)
(A) Write a short-note on 'this' keyword.
(B) Define left shift (<<) operator with short program
                                           OR
Q-3 Answer the following questions
                                                                                           (14)
(A) Explain Method Overloading with example.
(B) Explain Method Overriding with example.
Q-4 Answer the following questions (Any Two)
                                                                                           (14)
(A) Explain throw, throws, and finally in java
(B) What is the Jump Statement in Java? List the jump statements
(C) Describe the Interface in Package and how to implement it.
(D) Define Type conversion and Type casting.
```

## Q-5 Answer the following questions (Any Two)

(14)

- (A)Write a program of Arithmetic Mean, Geometric Mean and Harmonic Mean.
- (B) Explain Primitive Data types of Java with a short programme
- (C) Define Types of Operators in Java
- (D) Write a program to get the following output

```
0
0 1
0 2 4
0 3 6 9
0 4 8 12 16
0 5 10 15 20 25
0 6 12 18 24 30 36
0 7 14 21 28 35 42 49
0 8 16 24 32 40 48 56 64
0 9 18 27 36 45 54 63 72 81
```