

KADI SARVA VISHWAVIDHYALAYA
B.E. Semester V Examination – November – 2016
CE 505 / IT 505 Object Oriented Programming with JAVA

DATE: 19.11.16

TIME: 10:30 to 1:30

TOTAL MARKS: 70

Instructions:

- 1 Answer each section in separate answer sheet.
- 2 Use of scientific calculator is permitted.
- 3 All questions are **Compulsory**.
- 4 Indicate **clearly**, the options you attempt along with its respective question number.
- 5 Use the last page of main supplementary for **rough work**.

SECTION - I

Q-1 A Write a program in JAVA to copy contents of one text file to another text file. **10**

B Explain the three principles of Object Oriented Programming. **5**

OR

B JAVA is platform independent. Justify. **5**

Q-2 A Give output of the following **10**

```
1 class Test {  
    public static void main(String args[]) {  
        Count myCount = new Count();  
        int times=0;  
        for(int i=0;i<100;i++)  
            increment(myCount,times);  
        System.out.println("count is "+myCount.count);  
        System.out.println("times is "+times);  
    }  
    public static void increment(Count c,int times) {  
        c.count++;  
        times++;  
    }  
}  
class Count {  
    public int count;  
    Count(int c){  
        count=c;  
    }  
    Count(){  
        count=1;  
    }  
}
```

```

2 class Test {
    public static void main(String [] args){
        int x= 0;
        int y= 0;
        for (int z = 0; z < 5; z++) {
            if (( ++x > 2 ) && ( ++y > 2 )) {
                x++;
            }
        }
        System.out.println(x + " " + y);
    }
}

3 class test {
    public static void main (String args []) {
        int i = 1, j = 10;
        do {
            if(i++ > --j) {
                continue;
            }
        } while (i < 5);
        System.out.println("i = " + i + "and j = " + j);
    }
}

```

OR

- A Write a program to achieve multiple inheritance in java. 5
- B Write a program to print Fibonacci series using recursion. 5

Q-3

- A Explain Constructors. Write a program to demonstrate constructor overloading. 5
- B Explain the following terms
this, final, super 5

OR

- A Write a JAVA program which will demonstrate the concept of partial interface 5
- B Write a program to demonstrate protected and default access modifiers in package. 5

SECTION - II

- Q-4 A Explain dynamic method dispatch with suitable example. 5
- B List True or False 5
1. Assignment operator is evaluated Left to Right.
 2. System.out.println("Test"), this will statement generate an error
 3. Abstract classes cannot contain constructor
 4. Multiple main methods are possible in java.
 5. Multiple public class are not allowed in a single file.
- C Explain the importance of exception handling in java. Which key words 5
are used to handle exceptions? Write a program to explain the use of
these keywords.

OR

- C Explain Exception handling in JAVA. Write an application that generates 5
custom exception if any value from its command line arguments is
negative.

Q-5

- A Create an applet with two textboxes and a button. 5
By clicking the button the values of two textboxes should be
interchanged.
- B Write a program to replace all "word1" by "word2" from a file1, and 5
output is written to file2 file and display the no. of replacement.

OR

- A Write a program to provide solution of producer consumer problem. 10

Q-6

- A Explain applet life cycle. 5
- B Write a program to demonstrate adapter classes. 5

OR

- Q-6 Write a program to demonstrate Event handling using Mouse Events. 10

KADI SARVA VISHWAVIDHYALAYA

B.E. Semester V Examination April-2014

CE 505 / IT 505 Object Oriented Programming with JAVA

DATE: 24/04/2015

TIME: 10.30 AM to 1.30 PM

TOTAL MARKS: 70

Instructions:

- 1 Answer each section in separate answer sheet.
- 2 Use of scientific calculator is permitted.
- 3 All questions are **Compulsory**.
- 4 Indicate **clearly**, the options you attempt along with its respective question number.
- 5 Use the last page of main supplementary for **rough work**.

SECTION - I

Q-1 A Give the output of following code.

1	System.out.println("\u0042");	1
2	System.out.println(10.10%20);	1
3	System.out.println("\101");	1
4	double d = 323.142; byte b; b = (byte) d; System.out.println("b = " + b);	2
5	class gp { int a; gp() { System.out.println("GP-Default"); } gp(int x) { System.out.println("GP-Parameterised"); } } class parent extends gp { parent() { System.out.println("Parent-Default"); } parent(int x) { System.out.println("Parent-Parameterised"); } } class Demo { public static void main(String ar[]) { gp g1 = new gp(5); parent p1 = new parent(10); } }	3
6	class DemoPaper { public static void main(String ar[]) { char c1 = 72; char c2 = ch1++; System.out.println(c2 + " " + c1); } }	2

Q-1 B Find out error(s) if any in the following code and correct it.

```
1 interface int1 {  
    int a;  
    void put();  
}  
class myClass implements int1 {  
    void put() {  
        System.out.println("Method Called");  
    }  
}  
class DemoPaper {  
    public static void main(String ar[]) {  
        int1 c1 = new int1();  
        c1.put();  
    }  
}  
2 class gp {  
    gp() {  
        System.out.println("Default - GP");  
    }  
    gp(int x) {  
        System.out.println("Parameterised - GP");  
    }  
}  
class p extends gp {  
    p() {  
        System.out.println("Default - P");  
    }  
    p(int x) {  
        System.out.println("Parameterised - P");  
    }  
}  
class child extends p {  
    child() {  
        super(10);  
        System.out.println("Default - child");  
    }  
    child(int x) {  
        System.out.println("Parameterised - child");  
    }  
}  
class PaperDemo {  
    public static void main(String ar[]) {  
        child c = new child();  
    }  
}
```

3

2

OR

B Differentiate between constructor and method of class. Define method overloading and its purpose. Write a program to demonstrate the constructor

5

overloading.

Q-2 Answer the following questions.

- A Define and write a program to differentiate between pass by value and pass by reference. 5
B Explain & illustrate by examples use of final, finally and method finalize. 5

OR

- A Define polymorphism with its need. Define and explain static and dynamic binding using program. 5
B Write a JAVA program which will demonstrate the concept of partial interface. 5

Q-3 Answer the following questions.

- A Differentiate between abstract class and interface specifying matrices of differences. Write a program to define abstract class, with two methods addition() and subtraction(). addition() is abstract method. Implement the abstract method and call that method using a program(s). 5

- B Explain the characteristics of OOP. 5

OR

- A Describe **abstract** class called **Shape** which has three subclasses say **Triangle, Rectangle, Circle**. Define one method **area()** in the abstract class and override this **area()** in these three subclasses to calculate for specific object i.e. **area()** of **Triangle** subclass should calculate area of triangle etc. Same for **Rectangle** and **Circle** 5

- B Give example of inner and outer class. 5

SECTION – II

Q-4 A Write JAVA program for the following.

10

- 1 Create two threads; Thread-1 will print A to J with delay of 1 second. Thread-2 will print 101 to 110 with delay of 2 second. Make sure that main thread exits last.
- 2 Create an applet that has a geometrical figure (square, rectangle or circle) and has "KSV" printed at the centre of figure.

Q-4 B Fill in the blanks such that program will generate expected output.

5

```
class FiboPaper {  
    public static void main(String args[]) {  
        int no = Integer.parseInt(args[0]);  
        _____ . fibo(_____, ___, no);  
    }  
    _____ void fibo(int f1, int f2, int no) {  
        int f3;  
        if(no==0) {  
            return;  
        }  
    }  
}
```

```
f3 = f1 + f2;  
System.out.println(f1 + " ");  
fibo(____,____,____);  
}  
}
```

Expected Output:

3 5 8 13 21

OR

- B Write a JAVA program which will throw customised exception if entered string length is greater than 6. 5

Q-5 Answer the following questions.

- A Explain the life cycle of a thread.. 5
B Explain applet life cycle. 5

OR

- A Explain Event Delegation model in Java. 5
B Differentiate Application and Applet. 5

Q-6 Answer the following questions.

- A Write an applet that tracks the position of the mouse when it is dragged or moved. At the current mouse position, it displays message (x, y) showing current position of the mouse. The message should disappear as soon as the user releases the mouse. 5
- B Explain wait, notify, synchronized. 5

OR

- A Write a program that copies the content of one file to another 5
B Explain the use of following methods with example:
equals(), getBytes(), endsWith() 5

KADI SARVA VISHWAVIDYALAYA

B.E SEMESTER V REGULAR EXAMINATION (NOVEMBER - 2015)

DEPARTMENT: COMPUTER ENGG. AND INFORMATION TECHNOLOGY

SUBJECT CODE: CE 505 / IT 505

SUBJECT NAME: OBJECT ORIENTED PROGRAMMING WITH JAVA

DATE: 28-Nov-2015

TIME: 10:30 am to 1:30 pm

TOTAL MARKS: 70

INSTRUCTIONS:

1. Answer each section in separate Answer sheet.
2. Use of Scientific Calculator is permitted.
3. All questions are compulsory.
4. Indicate clearly, the option you attempted along with its respective question number.
5. Use last page of main supplementary for rough work.

SECTION – 1

Q:1 All compulsory.

- (A) Describe the following features of java: 05
1) Multithreaded 2) Architecture-neutral 3) Interpreted 4) High performance
5) Distributed
- (B) Differentiate between Method overloading and method overriding. 05
- (C) Explain static with example. 05

OR

- (C) Differentiate between constructor and method of class. 05

Q:2 Answer the following Questions.

- (A) Explain single level and multiple inheritances in java. Write a program to demonstrate combination of both types of inheritance as shown in Figure-1. i.e. hybrid inheritance 05

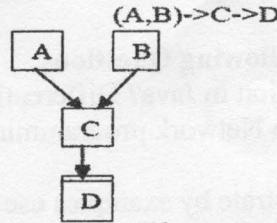


Figure 1

- (B) (i) JVM is platform dependent. Justify. 05
(ii) There is no destructor in Java. Justify.

OR

- (A) The abstract Vegetable class has three subclasses named Potato, Brinjal and Tomato. Write an application that demonstrates how to establish this class hierarchy. Declare one instance variable of type String that indicates the color of a vegetable. Create and display instances of these objects. 05
- (B) Explain interface in JAVA. How do interfaces support polymorphism? 05

[P.T.O]

- Q:3** **Answer the following Questions.**
- (A) Explain the followings: (i) this (ii) super 05
 (B) Differentiate String class and StringBuffer class. Also explain its methods. 05
- OR**
- (A) What is package in java? Explain steps to create package with example. 05
 (B) Illustrate by example – generic programming. 05

SECTION – 2

- Q:4** **All compulsory.**
- (A) What is Layout? Explain various Layout Managers in java. 05
 (B) Compare Binary IO and Text IO. 05
 (C) Write a complete program to create a frame for providing GUI to implement a stack for storing integer numbers. There are two buttons called PUSH & POP and a text field. Clicking of button PUSH pushes the number entered in the text field onto the stack. The click of button POP pops an element from the stack and displays that in the text field. 05
- OR**
- (C) Explain Applet Life Cycle. 05

- Q:5** **Answer the following Questions.**
- (A) What is Multithreading? Explain Life Cycle of Thread with example. 05
 (B) Write a note on Exception Handling in JAVA. 05
- OR**
- (A) Write an application that creates and starts three threads. Each thread is instantiated from the same class. It executes a loop with 10 iterations. Each iteration displays string "HELLO", sleeps for 300 milliseconds. The application waits for all the threads to complete & displays the message "Good Bye...". 05
 (B) Differentiate Checked and Unchecked Exceptions 05

- Q:6** **Answer the following Questions.**
- (A) What is collection in Java? Differentiate between Vector and ArrayList 05
 (B) Write a note on Network programming in Java. 05
- OR**
- (A) Explain & illustrate by examples use of final, finally and method finalize. 05
 (B) Write a note on JavaBeans. 05

--- ALL THE BEST---