

SUMMER-2012

UNIT 1

Q.1 a) Explain the following terms.

i. Inheritance. **ii.** Encapsulation **iii.** Polymorphism.

(7)

b) Write 'for', 'do – while' and 'while' statements to compute the following sum: $5 + 10 + 15 + 20 + \dots + 50$.

(7)

Q.2 a) Differentiate between runtime and compile – time polymorphism

(6)

b) Differentiate between procedural language and object oriented programming language.

(7)

UNIT 2

Q.3 a) What do you mean by constructor and parameterized constructor and parameterized constructor? Explain with proper example.

(6)

b) Consider the following java program

(7)

```
class Demo {  
    public static void main (string args [ ]) {  
        {  
            for ( int j = 0; j < args. Length; j++)  
                system. out . println ("arg [" + j + "]" : "+ args [j]);  
        }  
    }  
}
```

With reference to the above code, answer the following:

a) What is the task done by above code?

b) What is printed if the Demo is executed like this:
Java Demo.

c) What is printed if the Demo is executed like this:
Java Demo one two three

d) What is difference between 'args. Length' and 'args [0]. Length().

Q.4 a) Write a simple java application which initialized 5×5 matrix and then display the same on console in matrix form. (7)

b) Explain the following

i. Garbage collector. **ii.** Finalization. (6)

UNIT 3

Q.5 a) What is inheritance? Explain multi – level inheritance with example. (7)

b) Differentiate between string and string buffer class. Also explain the constructors of both the classes. (7)

Q.6 a) Explain with example the following sting operations.

i. substring() **ii.** concat() **iii.** trim() (7)

b) What is method overriding? Explain with example. (7)

UNIT 4

Q.7 a) Explain the following:

a) Try. **b)** Catch **c)** Throw **d)** Throws **e)** Finally (6)

b) Write a java program to write data to a file using FileOutputStream. (7)

Q.8 a) Write is serialization and de-serialization? Explain with example. (6)

b) Write a java program to read character stream using File Reader. (7)

UNIT 5

Q.9 a) Differentiate between java applet and java application. (6)

b) Write an applet to demonstrate the use of getparameter() method to pass parameters to your applet from applet tag in HTML. (7)

Q. 10 a) What are the various constructors associated with color class? Explain each in detail. (6)

b) Write an applet to draw rectangle, rounded rectangles and a fill rectangle inside applets visible area. (7)

UNIT 6

Q. 11 a) Explain the following. **(7)**

i. Delegation event model

ii. Events.

iii. Event sources.

iv. Event listeners

b) What are adapter classes? Write an applet that implement the Mouse Clicked() of Mouse Adapter and Mouse Dragged() method of Mouse Motion Adapter. **(7)**

Q. 12 a) Write an applet to demonstrates the following operations. It displays the current coordinates of to the mouse in the applet's status window. Each time a button is pressed, the word "Down" is displayed at the location of the mouse pointer. Each time the button is released the word "UP" is shown. If a button is clicked the message "Mouse Clicked" is displayed in the upper left corner of the applet display area. As the mouse enters or exists the applet window a message is displayed in the upper-left corner of the applet display area. When dragging the mouse, a* is shown, which tracks with the mouse pointer as it is dragged. **(14)**