Subject: JAVA AND WEB PROGRAMMING

Time: 3 Hours   Max. Marks: 1

DECEMBER 2010

NOTE: There are 9 Questions in all.
- **Question 1 is compulsory and carries 20 marks. Answer to Q.1 must be written in the space provided for it in the answer book supplied and nowhere else.**
- **The answer sheet for the Q.1 will be collected by the invigilator after half an hour of the commencement of the examination.**
- **Out of the remaining EIGHT Questions, answer any FIVE Questions, selecting THREE questions from Part A and TWO questions from Part B. Each question carries 16 marks.**
- **Any required data not explicitly given, may be suitably assumed and stated.**

Q.1 **Choose the correct or the best alternative in the following:** (2×10)

a. What will be the value of x , m and n after execution of the following statement?
```
int x, m, n;
m = 10;
n = 15;
x = ++m + n++ ;
```
 (A) x =25 , m = 10 , n = 15   **(B)** x = 27 , m = 10 , n = 15
 (C) x = 26 , m = 11 , n = 16   **(D)** x = 27 , m = 11 , n = 16

b. Consider the following statements
```
int x = 10 , y = 15;
x = ((x<y) ? (y+x) : (y-x));
```
 What will be the value of x after executing these statements?

 (A) 10   **(B)** 15
 (C) 25   **(D)** 5

c. Which of the following operator is overloaded for string objects

 (A) + =   **(B)** −
 (C) &   **(D)** <<

d. Which of the following control expression are valid for an if statement?

 (A) an integer expression   **(B)** a Boolean expression
 (C) either A or B   **(D)** neither A nor B

e. What is wrong in the following class definition?
```
Abstract class print
{
Abstract show ( );
}
Class display extend print
{
```

}
(A) Nothing is wrong
(B) Wrong.Method show ( ) should have a return type.
(C) Wrong.Method show ( ) is not implemented in display.
(D) Wrong.Display does not contain any members.

f. Which of the following are the wrapper classes?

(A)Byte   (B) Vector
(C)String   (D) Short

g. The tags that require a starting as well as ending tag are called _____

(A)Pair element   (B) Twin element
(C)Container   (D) Empty element

h. To define the basic font size, which of the following tag is used?

(A) SIZE   (B) BASEFONT
(C)FONT   (D) All of these

i. To create a link to an anchor, use the _____ property in A tag.

(A)Name   (B) Tag
(C)Link   (D) Href

j. Java script is mainly used with

(A)Database   (B) Text
(C)Web pages   (D) None of the above

PART A
Attempt any THREE questions. Each question carries 16 marks.

Q.2	a. What are the features of Java?	**(3)**
	b. How Java differs from C++?	**(3)**
	c. How is Java strongly associated with the internet?	**(3)**
	d. Describe the structure of a typical Java Program.	**(5)**
	e. Java is freedom language, comment.	**(2)**
Q.3	a. Explain with example, the difference between ++m and m++.	**(3)**
	b. What is type casting? Why is it required in programming?	**(3)**
	c. Explain the difference between the nested ifs and the switch statement.	**(3)**

d. Write a program using the do while loop to calculate and print the
Fibonacci numbers. The number of the sequence 1 1 2 3 5 8 13 21-----are ca
Fibonacci numbers. **(7)**

Q.4 a. Create a class named Box with suitable parameter and compute the volume of
Box. Also describe how this Box is referenced as a Type statement in Java?
(8)

b. Write a program with two dimensional array to produce the following output
(8)

```
    1
    1   1
    1   2   1
    1   3   3   1
    1   4   6   4   1
    1   5   10  10  5   1
    1   6   15  20  15  6   1
    1   7   21  35  35  21  7   1
    1   8   28  56  70  56  28  8   1
```

Q.5 a. What is the difference between an interface and a class? **(2)**

b. What is a package? How do we add a class or an interface to a package? **(4)**

c. How do we set priorities for threads? **(3)**

d. Describe the complete life cycle of a thread. **(7)**

Q.6 a. What is an exception? Show by example how an exception can handled using
try and catch blocks? **(8)**

b. What are the input and output streams? Explain them with illustrations. **(8)**

PART B
Attempt any TWO questions. Each question carries 16 marks.

Q.7 a. What is HTML? Explain the structure of HTML document. **(6)**

b. How can background images is set in HTML? **(4)**

c. Differentiate between container tags and empty tags **(3)**

d. What is HTTP? Explain **(3)**

Q.8 a. Write an HTML code for the following output: **(6)**

Information of Students

Sr.No.	Name of Students	Roll No.	Class
001	Amit	A 067	12 – A
002	Nitin	A 068	11 – B
003	Annu	A 069	12 – C
004	Sumit	A 070	10 - B

    b. What do you mean by framing in HTML? **(4)**

    c. Describe the elements of web design. **(6)**

Q.9   a**.** How a checkbox, password field and pull down menu is created in forms? **(6)**

    b. What is CGI? **(2)**

    c. What is Java? How Java script is embedded in HTML? **(4)**

    d. What do you mean by an event? How event handling is done in Java Script?
(4)