SPRING END SEMESTER EXAMINATION-2013

4th Semester B.Tech

WEB TECHNOLOGY IT-401

[Regular-2011 Admitted Batch & Back]

Full Marks: 60   Time: 3 Hours

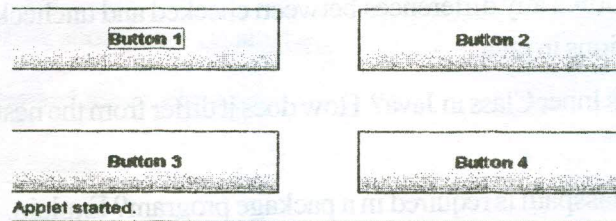*Answer any SIX questions including Question No.1 which is compulsory.*
The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as
practicable and all parts of a question should be answered at one place only.

1. (a) Write down any two rules of method overriding.   [2 × 10

   (b) Write down the difference between protected and friendly access specifires in java.

   (c) Write down in brief about JComboBox Class along with the hierarchy.

   (d) Write down any differences between checked and unchecked exceptions in java.

   (e) What is Inner Class in Java? How does it differ from the nested Class?

   (f) Why classpath is required in a package program? Explain.

   (g) What is a programming language and what are its components?

   (h) Explain in brief about Software Simulation.

   (i) Write down any two differences between cellpadding and cellspacing.

   (j) Write down the syntax for adding a <marquee> tag in html.

(1)

2. (a) Write down the language paradigm in detail. [4

   (b) How can we pass parameter to the applet, Explain? Write a [4
   program in java which will pass Registration No, Name and
   Grade as a parameter and display the same using paint ( )
   method in applet.

3. (a) Create a specimen of a corporate web page. Divide the [4
   browser screen into two frames. The frame on the left will be
   a menu consisting of two hyper links About Us and Login.
   Clicking on any one of these links will lead to the appropriate
   page which must be open in the target frame, which is on the
   right hand side.

   (b) Explain in brief about any four types of translator. [4

4. (a) Write down a program in java using Grid Layout which will [4
   add 4 buttons in an applet in two rows and two column as per
   the following figure.

   (b) Write a program in java which will accept a String from [1+1.5+1.5
   the keyboard and the program will do the following
   operations:
   (i)   Check whether the string is palindrome or not.
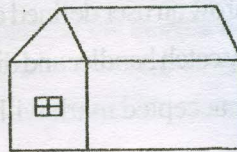   (ii)   Count the number of words in the string.

(2)

5. (a) Create an html form using the following fields -- [4

Name -textbox
Address -TextArea
Qualification - Select Option
Gender - RadioButton (Male and Female)
Hobbies — CheckBox
Password —PasswordField
Image —ImageControl
Submit —Button

(b) Draw the following picture using the methods of the Graphics [4
class.

6. (a) Describe some type promotion rules that applies to expressions [2+2
in Java. Write down the output of the following programs.

```
class TypePromotion
{
    public static void main(String args[])
    {
        byte b = 42;
        char c = 'a';
        short s = 1024;
        int i = 50000;
        float f = 5.67f;
        double d = .1234;
        double result = (f * b) + (i / c) - (d * s);
        System.out.println((f*b)+" "+(i/c)+" - "+(d*s));
        System.out.println("result = " + result);
    }
}
```

(b) Define an abstract class in Java. Write a program in Java having [4
an abstract class called Shape with a method called
calculateArea( ). The shape class will have three child classes
named Cirlce, Triangle and Rectangle which will override the
methods and display the area accordingly.

7. (a) Define Checked and Unchecked Exceptions in Java? Write a [4
program in java which will accept the mark of a student from
the keyboard. If the mark is less than zero or greater than 100,
then the program will throw an user defined exception and catch
the same using necessary catch handler and display the necessary
message, otherwise the accepted mark will be displayed.

(b) Write a program in java having a class A. The class A will have [4
two child classes called B and C. The class A and B will be in
package p1 and class C will be in package p2. Class A has
four variables with different access specifiers. Illustrate their
visibility in child class with suitable example.

8. Write short notes on any two. [4 × 2

   (a) BorderLayout Manager

   (b) Firmware

   (c) Style Sheet and its types

   (d) Command Line Arguments

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