SAMPLE PAPER
INFORMATICS PRACTICES
CLASS – XI

MM: 70   Time: 3Hrs.

General Instructions:
1. This question paper consists of 7 questions.
2. All the questions are compulsory.
3. Answer the questions after carefully reading the text.

1. Answer the following questions: 2 x 5 = 10

    a. What are the functions of an Operating System? Write any two functions.

    b. Differentiate between PDA and Workstations.

    c. Discuss the supercomputers developed in India.

    d. Write any four disadvantages of touch screen?

    e. What is a biometric sensor? Describe in brief.

2. Answer the following questions:

    a. While working in NetBeans, Rajmeeta included a Listbox in the form. Now she wants the list of her friends' names to be displayed in it. Which property of Listbox control should she use to do this?   1

    b. What is the purpose of default clause in a switch statement?   1

    c. How would you set shortcut key or access key of letter A for a button?   1

    d. How many times does the following loop execute? What is its type (Entry-controlled or Exit-controlled)?   2

    ```
    int x = 2, y = 20;

    while ( x <= y ){

            System.out.println(x);

            x = x + 3;

    }
    ```

    e. How would you programmatically find if a checkbox is selected or not without using an event?   1

    f. What is Write Once Run Anywhere characteristic of Java?   2

    g. Design a label control **imgLabel** in your frame and write proper coding/steps to display an image "**c:\image\country.jpg**" .   2

3. Answer the following questions:

    a. Discuss the difference between multiprogramming OS and Multiprocessing OS.   2

    b. What do you mean by language processor? Give examples.   2

    c. What is fragmentation? How does it affect computer's performance?   2

    d. Describe why authentication is important for file protection?   2

    e. Why do you think IDEs are useful in application development?   2

4. Answer the following questions:

    a. What will be the *output* of the following expression if (i) age = 25 (ii) age = 85?

        System.out.println(age > 65 ? 350 : 100);   2

    b. Differentiate between if-else and switch-case statements in Java.   2

    c. Give java code to display the following pattern: 2

    4

    43

    432
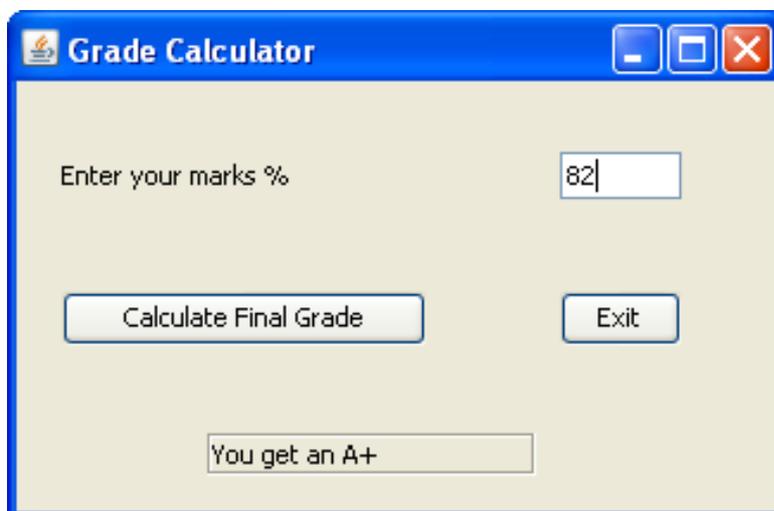
    4321

    d. Rewrite the following program code using a *for* loop: 2

```
int i = 1, sum = 0;
while ( i < 10 ){
    sum += i;
    i += 2;
}
```

    e. The following code has some error(s). Rewrite the correct code underlining all the corrections made: 2

```
int i, j = 5;
i = = j + 5;
if ( i = j ){
    jTextField1.setText( i and j are unequal );
Else{
    System.out.print("i and j are equal");
}
```

    f. Answer the following based on the interface shown below:

    i.   Write the code for exit button.   1

    ii.   If you are asked to add a Clear button to the application, what code would write for it so that the text field marksTF and label resultLbl get cleared when it is clicked?

                                                                            2

    iii. The percentage marks are to be entered in the text field (marksTF) and upon clicking at the button (calcBTN), corresponding grade (as per following rules) should be displayed in the label (resultLbl) below command button.

                                                                            3

Marks %	Grade
>=90	A++
80 – 90	A+
75 – 80	A
60 – 75	B
50 – 60	C
40 – 50	D
< 40	Fail

5. Answer the following questions:

   a. How would you check whether 3rd item of a list namely CityList is selected or not? Write code that would set the text of label (Result) to "3rd Item is selected" if the 3rd item of the list is selected.   2

   b. What are the differences between a check box and radio button?   2

   c. Design a program in Java Netbeans to test, whether an entered no is PRIME NO.   3

   d. Design a program to calculate factorial of a given no.   3

6. Answer the following questions:

   a. Write code to search for an item "Jaipur" in a list namely CityList. Display "It is in the list" in a label DPL if found in the list otherwise "Not in the list" in label DPL.   2

   b. State the differences between List and Combobox control.   2

   c. Why does a comboBox fire item event twice?   1

   d. What is the significance of buttongroup ? How do you create a button group?   2

   e. How can you display multiple lines of un-edited text?   1

   f. What is dispose() used for?   1

   g. What for do you use nextFocusableComponent property?   1

7. Answer the following questions:

   a. Discuss briefly about JFC and its constituent APIs.   2

   b. Which event listeners would respond to following actions?   2

      i.   User moves the mouse.

      ii. User presses a key on keyboard.

      iii. A component loses focus

      iv. User clicks a button.

   c. Name any two top level containers.   1

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