

Class- XI
Sample Paper
INFORMATICS PRACTICES

Time: 3 Hours

Maximum Marks:70

Note.

1. This question paper is divided into three sections.
2. Section-A and Section-B are of 25 Marks each.
3. Section –C consist of 20 marks
4. Answer the question after carefully reading the text.
5. All questions are compulsory.

Section –A

1. Answer the following questions:

- a) What do you mean by BIOS? 1
- b) What do you mean by presentation software? 1
- c) How viruses are detected? 1
- d) What is the difference between = and == operator in java? 1
- e) Name two OOP languages? 1

2. Answer the following questions:

- a) Define secondary storage devices. Make a list of secondary storage devices used by you. 2
- b) Difference between the following: 3X 2=6
 - i) RAM and ROM
 - ii) Compiler and interpreter
 - iii) Single user and Multi user
- c) How does a virus affect a computer system? 2

3. Answer the following questions:

- a) Evaluate the following expressions separately in Java. Assume all variable to be integers and initial value of a as 10 and b as 20 $6 \times \frac{1}{2} = 3$
 - i) $x = a++ + b++;$
 - ii) $x = ++a + ++ b;$

- iii) $x = ++a + b++;$
- iv) $x = a / b \% b;$
- v) $x = b / a \% b;$
- vi) $x = b + a++ \% b;$

b) Find the output of the following code snippet written in java 3

```
public static void main(String []args)
{
    int x=10, y=5;
    System.out.println(x++);
    System.out.println(++y);
    System.out.println((x++ + ++y));
    System.out.println(++x - y++);
    System.out.println((x++) + (++y));
    System.out.println(++x-(y++));
    System.out.println((x++) + (++x));
    System.out.println("x = " + X + " y=" + y);
}
```

c) Find the output of the following code snippet written in java 2

```
public static void main(String args[])
{
    int no1=2,no2=1,i;
    while(no2<=3)
    {
        i=no1;
        while(i<=no2)
        {
            no1=no1*i;
            i++;
        }
        System.out.println("No1 " + no1);
        System.out.println("No2 " + no2);
        no2++;
    }
}
```

d) How many times will the following loop get executed and what will be the final value of the variable l after execution the loop is over. 2

```
int l = 5;
do
{
```

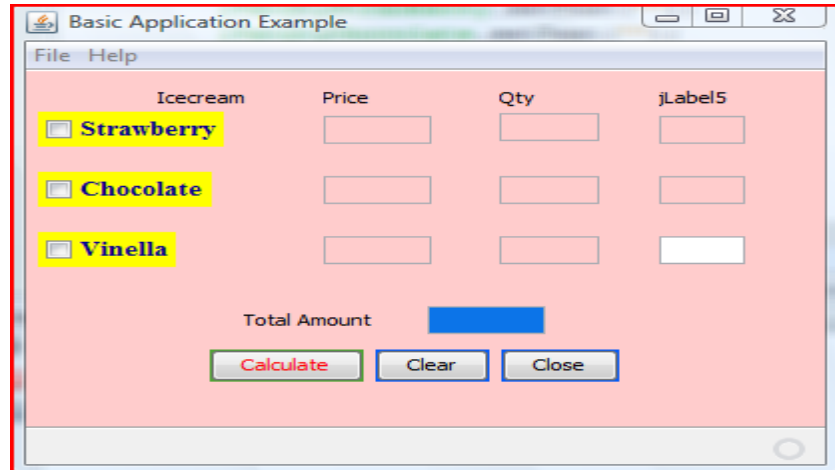
```
l += 3;
System.out.println("l = "+l);
l = l + 1;
}
while (l >= 9);
```

SECTION-B

4. Assume the following interface built using Netbeans used for bill calculation of a ice-cream parlor. The parlor offers three varieties of ice-cream – vanilla, strawberry, chocolate. Vanilla ice-cream costs Rs. 30, Strawberry Rs. 35 and Chocolate Rs. 50. A customer can chose one or more ice-creams, with quantities more than one for each of the variety chosen. To calculate the bill parlor manager selects the appropriate check boxes according to the varieties of ice-cream chosen by the customer and enter their respective quantities.

Write Java code for the following:

- On the click event of the button 'Bill', the application finds and displays the total bill of the customer. It first displays the rate of various ice-creams in the respective text fields. If a user doesn't select a check box, the respective ice-cream rate must become zero. The bill is calculated by multiplying the various quantities with their respective rate and later adding them all. 3
- On the Click event of the clear button all the text fields and the check boxes get cleared. 3
- On the click event of the close button the application gets closed. 2
- Assume the names of control and make a list. 2



5. ABC School uses the following interface built in java to check the eligibility of a student for a particular stream from science, commerce and humanities. The user first enters the total percentage and selects the desired stream by selecting the appropriate option button. An additional 5% is marks is given to students of NCC.

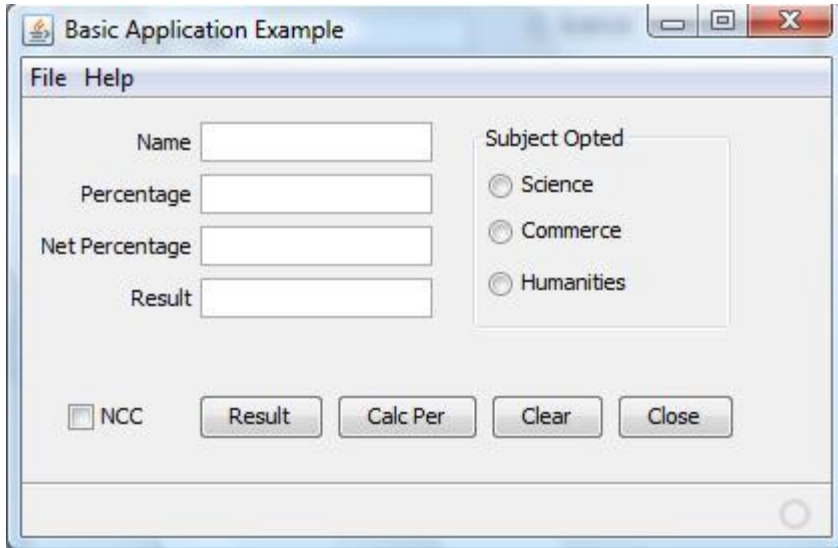
Write Java Code for the following

a. On Action event of the button 'Calc Percentage' Net percentage of the student is calculated and displayed in the appropriate text filed. Net percentage is same as that of the actual percentage if the student doesn't opts for NCC otherwise 5% is added to actual percentage. 3

b. On Action event of the button 'Result', the application checks the eligibility of the students. And display result in the appropriate text field. Minimum percentage for science is 70, 60 for commerce and 40 for humanities. 3

c. On the Click event of the clear button all the text fields and the check boxes get cleared. 2

e. On the click event of the close button the application gets closed. 2



- b. i)** What is IDE? Name two IDE for Programming in java. 2
 ii) Name any two type of Tokens available in Java. 1
 iii) Name the various primitive data type available in Java. 1
 iv) What are Reference data types? 1

SECTION-C

- 6.** Differentiate between the following 5X 2= 10
 i) Text Field and Text area components
 ii) Text Field and password field components.
 iii) Entry control loop and exit control loop
 iv) If else statement and Switch statement
 v) getText() and setText() method

7. Answer the following:

- a. Write Java code for the following: 2 X 4= 8
 i.. To check whether given number is Armstrong or not.
 ii. To inter change the value of two variables without using third variable.
 b. Define anti virus software. 1
 c. What is the purpose of 'break' statement in java? 1