CBSE Class 11th Informatics Practices (Theory)
Half Yearly Examination Set-B 2016-2017
Indraprastha International School

General Instructions

- This question paper contains 9 questions.
- Write the answers neatly and legibly.
- All questions are compulsory.

1. **Answer the following questions:**
   a. What is a bus? What is the difference between Data Bus and Address Bus of a computer system? (1)
   b. Differentiate between Single user & Multiuser Operating System. (1)
   c. How is OCR different from OMR? (1)
   d. What is the danger of a Trojan Horse? How does it support spyware? (1)
   e. Define the term Firewall in computers. How does firewall work to protect your computer? (1)

2.
   a. What is a Cyber Crime? Name the Cyber Act in India. (1)
   b. Expand the term CAPTCHA. Explain its usage. (1)
   c. What do you mean by PC instrusion? Name any one method to avoid it. (1)
   d. Write short notes on : (i) Cookies (ii) Worms (2)

3.
   a. While working in NetBeans, Riyan wants to display "Cleared" or 'Re-attempt required' message depending on the marks entered in JTextField. If marks are more than 40 then display the message "Cleared" otherwise display "Re-attempt required". Help him choose the most appropriate statement out of 'if statement' and 'Switch statement'. Write the code and justify your answer. (3)
   b. What are the two ways to convert Integer Values into String Type? (2)
   c. How is setEditable() method different from setEnabled() method of swing controls? (2)
   d. What will be the output of the following code segment. If char ch='x'; int a=3? (2)
   switch (ch)

```
{
case 'a': ++a;
case 'x': ++a;
case 'd': --a;
}
```

4. **Common Wealth International is a bank. The bank provides three types of loans – Car loan, House loan, Education loan.**

a. Write the command to make the txtNetamt un-editable and set car loan as default loan type. (2)

b. Write the command for Show Interest Amount button to show the interest rate in txtRate according to the following criteria: (3)

Car loan – 10%

House loan – 8.5%

Education loan – 5%

c. Calculate net amount as interest + amount and display in message box. (2)

d. Write the code to exit the application. (1)

5.

a. **What will the following java statements do? (5)**

   i. Integer.parseInt(jTextField1.getText());

  ii. jTextField2.setText("First Term Exams");

 iii. String A = "Hello" + "World";

 iv. x = Double.parseDouble(jTextField1.getText());

  v. JTextArea1.append("10+\n+12");

b. **Write a program to calculate the**

  a. power of a given no. (4)

  b. sum of n natural numbers. (4)

6.

  a. **Rewrite the following Switch…case statement code using if…else statement: (2)**

  int choice=Integer.parseInt(jTextField1.getText());

  switch(choice)

  {

  case 1: jTextField2.setText("January");

  break;

  case 2: jTextField2.setText("February");

  break;

  case 3: jTextField2.setText("March");

  break;

  case 4: jTextField2.setText("April");

  case 5: jTextField2.setText("May");

  break;

  default:

  jTextField2.setText("Only enter 1 to 5 please…");

  }

  b. **Find out the error(s) in the following code, if any: (2)**

  int sum=0;

  int i==1;

  do while(i<=10)

  {

  sum=sum+i;

  i=i+3

  }

  Systum.println(sum);

  c. **What will be the output of the following code segment: (4)**

   i. jTextArea1.setText("All \t the Best \n Class \t XI");

   ii. What will be displayed in Text1 and Text2 TextFields?

      String Text1, Text2;

      Text1="Good Morning";

      Text2= "India";

      Text1 = Text2+Text1;

d. **Rewrite the following code using for Loop: (2)**

```
int c;
c=2;
while (c<5)
{ JTextArea1.append (Integer.toString(c+c));
}
```

7. **Ravi is a programmer at Arora Book Store. He created the following GUI in Netbeans. Help him in writing code for the following:**

a. Write the code for [Calculate Price] button. Total price should be displayed in txtprice as book price into number of copies. (3)

b. Write the code to clear all the text fields and uncheck the check box, on the clicking of [Reset] button. (3)

c. Write the code for EXIT Button to close the application. (1)

8. **Answer the following questions:**

a. Which error is harder to locate and why? (2)

b. Differentiate between compile time errors and runtime errors. Give examples of each. (2)

c. Explain the following terms: (2)
   1. Exception Handling
   2. Prettyprinting

9. **Answer the following questions:**

a. Define Back End. Name any one Backend software. (2)

b. What is e-Governance? Give one advantage and one disadvantage. (3)

c. Suruchi works for a Shopping Mart. She wants to create controls on a form for the following operations :-
   Choose the most appropriate controls out of Text Box, Label, Radio Button, List Box, Combo Box, Check Box

S.No.	Function
1	Enter the code in hidden characters
2	Select Item Size (from a list of sizes)
3	Enter the Remarks of the Customer
4	Submit the Form