

# HALF YEARLY EXAMINATION, 2018-19

## INFORMATICS PRACTICES

Time - 3 hrs.

Class - XI

M.M. – 70

Date-20.09.2018 (Thursday)

Name of the student \_\_\_\_\_

Section \_\_\_\_\_

### **Instructions:**

- There are total 7 questions in this question paper.
- All questions are compulsory.
- Answers of the same section should be written together.

### **Q.1 Answer the following questions:**

- A What functions are performed by the operating system? (2)
- B What is Biometric sensor? Explain (2)
- C What is the difference between interpreter and compiler? (2)
- D What is the difference between Phishing and Spyware? (2)
- E Write any two names of Word processor and DTP software. (2)

### **Q.2 Answer the following questions:**

- A Describe JAVA compilation process. (2)
- B Write any four characteristics of Java. (2)
- C What are Java's Integer types? (2)
- D What will be the value of X1 and X2 for the following statements, if k=6 initially? (2)
- (i) `int X1 = (4* ++k)%5`
- (ii) `int X2 = (4* k++)%5`
- E (i) Write equivalent Java Expression for the following: (1)
- (a)  $2 - ye^{2y} + 4y$  (b)  $p + q/(r + s)^4$
- (ii) Given the following set of identifiers: (1)
- byte b ;
- char ch;
- int intval;
- long longval;
- short sh;
- float fl;
- Now identify the datatype of the following expressions:
- (a) `Intval*longval-ch` (b) `fl + longval/sh`

**Q.3 Answer the following questions:**

- A Given the following code fragment (2)
- ```
int i=50;
while(i>0)
System.out.println(i--);
System.out.println("Thank You");
```
- Rewrite the above code using do..while loop.
- B How many times the following loop executed? (2)
- ```
int s=0,i=0;
while(i++<5)
s += i;
```
- C (i) Write a program to find out the sum of the following series (2x2)
- $$S = 1+x+x^2+x^3+\dots+x^n$$
- (ii) Write a program to find out whether a given number is even, odd or prime.
- D What is the difference between a while and do...while loop? (1)
- E Write one limitation and one advantage of switch statement. (1)

**Q.4 Answer the following questions:**

- A Give the output of the following code fragment: (2)
- ```
long number = 5572331, result = 0;
do{
int digit = number % 10;
result += digit;
number /= 10;
} while (number >0);
System.out.println("Output:" + result);
```
- B Identify the errors in the following code fragment (2)
- ```
int n=10;
while(n>0)
System.Out.print(" "+n--);
n=n-2;
a=a+n; }
```
- C Give java code to set an image namely 'mylog.jpg' which is in 'D:\' drive. Set it to a label where name is 'mylbl'. (2)
- D Is java case sensitive? What is meant by the term 'case sensitive'? (1)

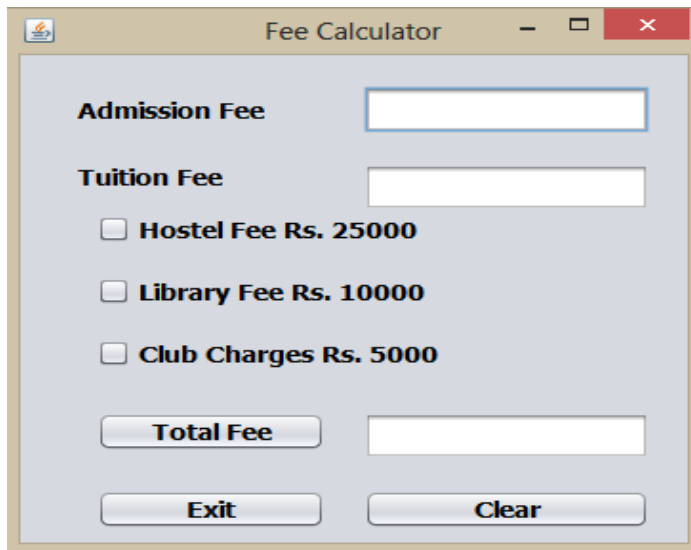
E Given the following code fragment: (2)

```
int n =22;  
System.out.println(++n+ "");  
System.out.println(n);
```

Now answer the following questions:

- (i) What output does the above code fragment produce?
- (ii) What is the effect of replacing ++n with n+1?

F The ABC International School want to develop a software to collect the fee from the students. Ms. Renuka who work as programmer in the school has been given this assignment. Help her to develop the coding for the following interface.



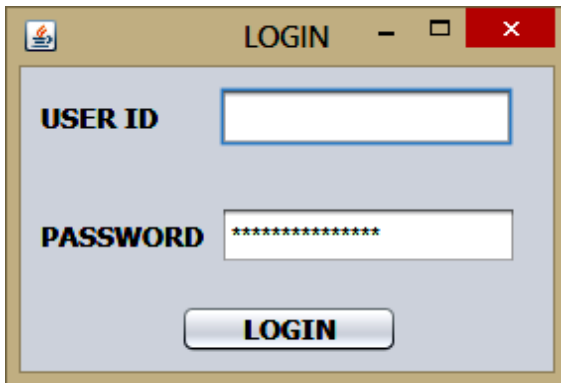
- (i) Write coding for the Total Fee Button to calculate the total fee of a student. The total fee is calculated as admission fee + Tuition fee + Hostel fee + Library Fee + Club Charges. The students have the option to select Hostel, Library or Club or all the facilities provided in the school. (4)
- (ii) Write coding to exit from the program. (1)
- (iii) Write coding to clear the contents from the text fields as well as remove the check marks. (1)

**Q.5 Answer the following questions:**

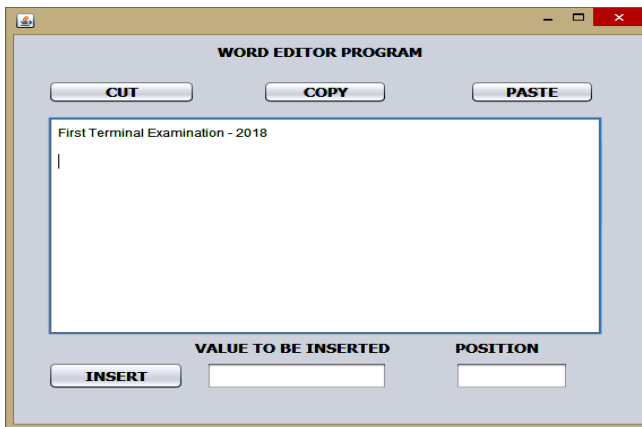
- A Write code that obtains the selected item of comboBox1 and adds it to the list of comboBox2. (2)
- B Give java code to obtain no. of days for the users and display it in years, months and days. Example input = 398 days, output = 1 year 1 month 3 days (2)
- C Compare and contrast a list box and combo box. (2)
- D How would you determine whether 7<sup>th</sup> item in a list namely MyList is selected or not? (2)
- E What is focus event? (1)
- F How would you determine whether a combo box is editable or not? Write necessary code. (1)

**Q.6 Answer the following questions:**

- A Design a program in Netbeans for Login id and password. When user clicks on LOGIN button, It prompts a message in the messageBox “Login Successful dear user <user Name>” if correct password is entered by the user, otherwise display a message “Bad Luck, <username>”. The password is “opjsrgh123”. (2)



- B What is the significance of a button group? How do you create a button group? (2)
- C What are these methods used for? (2)
- (i) getEchoChar() (ii) setEditable()
- D Write necessary coding for the following Text Editor software.



- (i) Write appropriate coding for CUT, COPY and PASTE buttons. (3)
- (ii) Write java coding for INSERT button to insert characters at the given position. (1)

**Q.7 Answer the following questions:**

- A Write coding to display the following pattern: (2)
- 6  
55  
444  
3333  
22222  
111111
- B Write coding to test whether a number is “Palindrome” number. (2)
- C What is mnemonic property? (1)

