

# HALF YEARLY EXAMINATION, 2017-18

## INFORMATICS PRACTICES

Time - 3 hrs.

Class - XI

M.M. – 70

Name of the student \_\_\_\_\_ Section \_\_\_\_\_ Date-16.09.2017 (Saturday)

### 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 Name any two Super Computers developed in India. (1)
- B What are hybrid computers? Give example of hybrid computers. (1)
- C Give any two functions of Operating system. (2)
- D What are communication buses? Explain in detail. (2)
- E Write any two benefits of e-Waste recycling. (2)
- F Define language processor software. Give examples of language processor. (2)

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

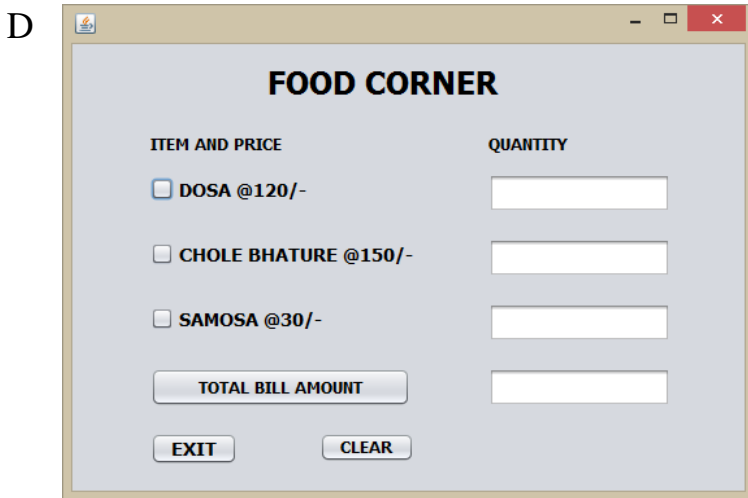
- A Write java coding to calculate factorial of a given integer : (2)  
Example - factorial of 5 is 120.
- B What kind of program elements are the following : (2)  
i) 'a'      ii) 15      iii) 4.3892      iv) main()
- C Write the purpose of the following two properties of a frame i.e., JFrame type object. (2)  
(i) Title      (ii) iconImage
- D Write the import command/statement for the following: (2)  
(i) To display an image on a label      (ii) To call a Message Dialog Box
- E Explain the following properties of JList type component : (2)  
(i) selectionMode      (ii) visibleRowCount

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

- A What is the use of mnemonic property of jButton control? (1)
- B What is the difference between an object of JTextArea and an object of JTextField? (1)
- C Write Java coding to display an image **abc.jpg** stored in “**d:\image**” folder in the JLabel1. (2)
- D Write Java coding to check the authenticity of a user by using jPasswordField. The Password of the user is “opjsLab1”. For the correct password it should display the message “You are authorised user” otherwise it should display “ Password is wrong”. (2)
- E How is the wrapStyleWord property related to lineWrapProperty? Explain in brief. (2)
- F Explain the following methods of JTextArea. Write syntax and example of each. (2)  
(i) replaceRange()      (ii) insert()

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

- A What is the difference between `CheckBox` and `RadioButto`? (2)
- B What is a Focus? Discuss the focus events in detail. (2)
- C How would you programmatically find if a checkbox is selected or not, without using an event? (2)



- (i) Write the coding for “TOTAL BILL AMOUNT” button to calculate total amount of the selected items. (3)
  - (ii) Write coding for “CLEAR” button. (1)
  - (iii) Write coding for “EXIT” button. (1)
- E Find the errors and rewrite the correct java code of the following : (2)

```
a = 1;
while (a<=10);
    a+;
System.out.print(“ ” a);
```

- F Write the output of the following coding: (2)
- ```
int i=5;
    int x1= i++;
    System.out.println(x1);
    int x2= i++ + ++i;
    System.out.print(x2);
```

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

- A How would you determine whether any element of a list (`cityList`) is selected or not? Give example with appropriate coding. (2)
- B Write code that obtains the selected item of a combobox (`CB1`) and adds it to another combobox (`CB2`). (2)
- C When a user selects an item from a combo box, what events are fired? (2)
- D Write java coding to check whether a number is perfect number. (2)  
A number is called perfect number if it is equal to the sum of its factors other than the number itself. Example:  $6 = 1+2+3$ .
- E Display the following pattern by using java coding : (2)

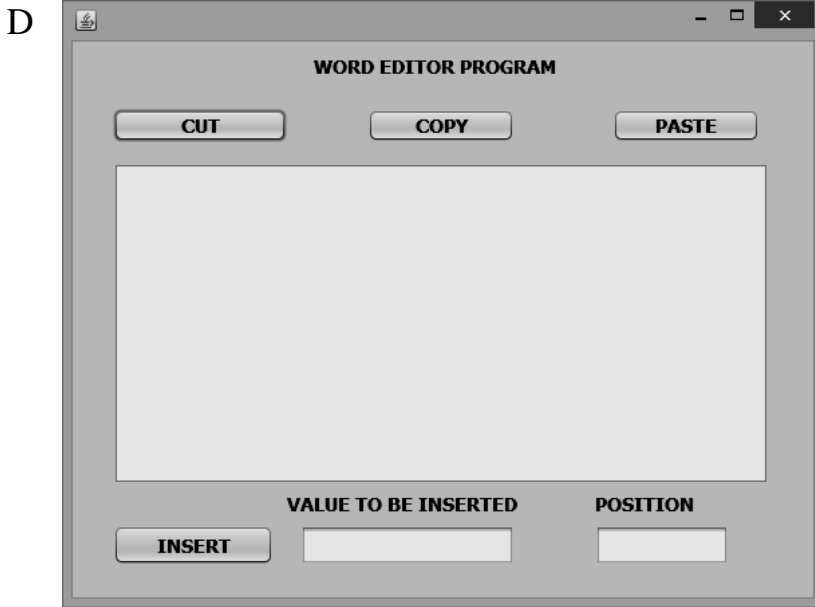
```
5 4 3 2 1
  5 4 3 2
    5 4 3
      5 4
        5
```

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

- A What are **JUMP** statements? (1)
- B What is the difference between while and do...while loop? (1)
- C Design an application which converts between Fahrenheit and Celsius temperature. There should be two text fields, one for each temperature scale. The user types for temperature value in either of the text fields; the other text fields displays the converted value. A control is to be provided for ending the programme. The following formulas below may be helpful. (3)

i)  $F = 9/5 * C + 32$

ii)  $C = 5/9 * F - 32$



- i) Write coding for CUT, COPY AND PASTE button for above application program. (3)
- ii) Write coding for INSERT button to insert the string value at the specified index position. (2)

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

- A What is meant by variable's scope? (1)
- B Write the output of the following coding: (2)

```
for(int i=1;i<=4;i++){  
    for(int j =1;j<=i;j++){  
        System.out.print(j);  
    }System.out.println();  
}
```

- C Convert the following **while** loop into **do...while** loop and write the coding after conversion. (2)

```
int i=100;  
while(i>0)  
System.out.println(i--);  
System.out.println("Thank you");
```

