

ARMY PUBLIC SCHOOL, R. K. PURAM

HALF YEARLY EXAMINATION, Sept. 2011

CLASS : XI

TIME : 3 Hrs

SUBJECT : INFORMATICS PRACTICES

MAX. MARKS : 70

SET – 1

- 1Q (a) Which of the following is not hardware : 1
(i) Hard disk (ii) Printer (iii) Keyboard (iv) CPU (v) Assembler (vi) A Java Program
- (b) Define the terms : (i) nibble (ii) gigabyte 1
- (c) What are the major strengths and weaknesses of computer ? 2
- (d) What are the software classifications ? Discuss their functioning in brief . 2
- (e) What is a port ? Name some port types briefly. 2
- (f) Write the full forms of the following terms : (i) VDU (ii) MICR (iii) OMR (iv) DVD 2
- 2Q (a) Name any 4 secondary storage devices and mention they need. 1
- (b) Name any four anti virus software. 1
- (c) What is the difference between RAM and ROM ? 2
- (d) Differentiate between compiler and interpreter 2
- (e) Define the terms : (i) Adware (ii) Spyware 2
- (f) Convert the Hexadecimal number 9F to Binary number. i.e., $(9F)_{16} = (-----)_2$ 2
- 3Q (a) What is Write Once Run Anywhere characteristic of Java ? 1
- (b) Differentiate between a Text Field and Text Area 1
- (c) What is the difference between if and switch statements ? 2
- (d) Name the data types supported by Java ? 2
- (e) What are the operators supported by Java ? 2
- (f) Write a program to check wither the given number is even or odd using *conditional operator* 2
- 4Q (a) While working in Netbeans, Ms. Lakshmi wants to display "Pass "or "Needs to Reappear" message depending the marks entered in jTextField. Help her to choose more appropriate statements out of "if statement" and "switch statement". 1
- (b) How one can make a Text Field un-editable on a Frame ? 1
- (c) The following code has error(s). Rewrite the correct code underlining all the corrections made : 2
`int Sum = 0 , Step = 5 ;`

```
int I ;
for ( i = 0 ; i <= 5 , i ++ ) ;
{
    Step += 5 ,
    Sum += Step ;
}
jTextArea1 . showText ( " " + Sum )
```

- (d) Rewrite the following program code using a switch statement :

```
if ( code == 1 )
    Month = "January" ;
else if ( code == 4 )
    Month = "April" ;
else if ( code == 8 )
    Month = "August" ;
else
    Month = "No Match" ;
```

2

- (e) Rewrite the following code using while loop.

```
int i = 2 ;
do {
    JOptionPane . showMessageDialog ( null , i + " " ) ;
    i += 2 ;
} while ( i < 51 ) ;
JOptionPane . showMessageDialog ( null , " Thank You " ) ;
```

2

- (f) Rewrite the following code using do-while loop.

```
for ( i = 0 ; i < 10 ; i ++ )
    ta1 . append ( 2 + " x " + i + " = " + ( 2 * i ) ) ;
```

2

- 5Q (a) What will be displayed in jTextArea1 after executing the following statements ?

```
jTextArea1 . setText ( " APS \t RKPuram \n HalfYearly \t 2011 " ) ;
```

1

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

controlled)

1

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

```
while ( x <= y )
```

```
{
```

```
    ta1.append ( " " + x ) ;
```

```
    x = x + 3 ;
```

```
}
```

(c) What will be the value of P and Q after execution of the following code :

```
int p , q = 100 ;
```

```
for ( p = 10 ; p <= 12 ; p ++ )
```

```
    q += p ;
```

```
JOptionPane . showMessageDialog ( null , "P : " + p + " Q : " + q ) ;
```

2

(d) What will be the value of a and b after execution of following code :

```
int a = 1 , b = 2 ;
```

```
if ( ++b < 5 )
```

```
    a * = b ;
```

2

(e) What will be displayed in jTextField1 after executing the following code ?

```
int m = 16 ;
```

```
m = m + 1 ;
```

```
if ( m < 15 )
```

```
    jTextField1. setText ( Integer . toString ( m ) ) ;
```

```
else
```

```
    jTextField1. setText ( Integer . toString ( m + 15 ) ) ;
```

2

(f) What will be the value of x and y after execution of following code :

```
int x , y = 0 ;
```

```
for ( x = 1 ; x <= 5 ; ++x )
```

```
    y = x ++ ;
```

```
-- y ;
```

2

6Q (a) What will be the output of the following code fragment when the value of ch is 'B' :

```
switch (ch) {
```

1

```
case 'A' : ta1.append (" Grade A ");
case 'B' : ta1.append (" Grade B ");
case 'C' : ta1.append (" Grade C ");
case 'D' : ta1.append (" Grade D ");
        break ;
default  : ta1.append (" Grade F ");
}
```

(b) State the output of the following code :

```
int a = 10 , b = 5 ;
if ( a > b ) {
    if ( b > 5 )
        tf1.setText ( " b is " + b );
    }
else
    tf1.setText ( "a is " + a );
```

1

(c) What are these methods used for ?

(i) isEditable () (ii) setEditable () (iii) getEchoChar () (iv) setText ()

2

(d) While working in Netbeans, Ms. Lakshmi wants to create controls on a form for the following functions. Choose appropriate swing controls for the following :

(i) Enter last name (ii) Select Gender (iii) Choose City from list of cities (iv) Submit form

2

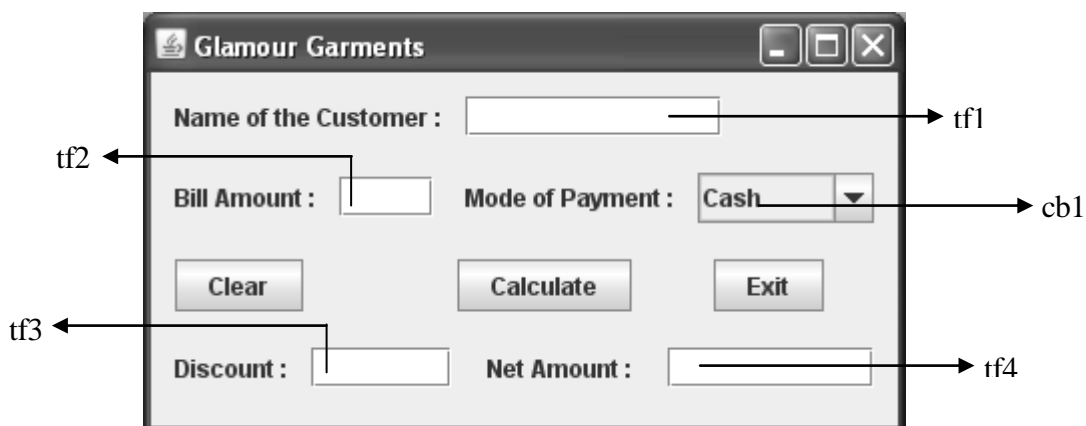
(e) Write a Java class program to print the first 10 natural numbers using while loop.

2

(f) Write Java code that takes the cost of a pencil from jTextField1 and number of pencils from jTextField2 and calculate total amount as cost * number of pencils to be displayed in jTextField3 and 20% service tax out of total amount in jTextField4. Draw the GUI also

2

7Q Case Study : Glamour Garments has developed a GUI application for their company as :



- (a) Write the code for Clear button to clear all the text fields and the check box. 2
- (b) Write the code for Exit button the application should be closed while displaying a message "Happy Shopping". 2
- (c) Write the code for Calculate button to :
 - (i) To ensure that the Bill Amount entered by the user is a positive number, if it is negative prompt a message to the user asking to reenter the valid Bill Amount 2
 - (ii) Calculate the discount on bill amount and display it in the respective text field, As per the given criteria : 3

Mode of Payment	discount
Cash	8 %
Cheque	7 %
Credit Card	Nil

- (iii) Calculate net amount as : $\text{Net Amount} = \text{Bill Amount} - \text{Discount}$ and display it in the respective textField 1

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