

ARMY PUBLIC SCHOOL, R. K. PURAM

HALF YEARLY EXAMINATION, Sept. 2011

CLASS : XI

TIME : 3 Hrs

SUBJECT : INFORMATICS PRACTICES

MAX. MARKS : 70

SET – 2

- 1Q (a) Which of the following is a hardware : 1
(i) Hard disk (ii) O S (iii) Utility Program (iv) CPU (v) Assembler (vi) A Java Program
- (b) Define the terms : (i) bit (ii) megabyte 1
- (c) What are the major classification of computers ? 2
- (d) What are the types of Operating Systems? Discuss their functioning in brief . 2
- (e) What is a communication bus ? Name the types briefly. 2
- (f) Write the full forms of the following terms : (i) LCD (ii) MICR (iii) OCR (iv) DVD-RW 2
- 2Q (a) Name any 4 ports and mention they need. 1
- (b) Name any four active protection method to secure to PC. 1
- (c) What is the difference between volatile and non-volatile memories ? 2
- (d) Differentiate between the two language processors that converts HLL to machine language 2
- (e) Define the terms : (i) Malware (ii) Firmware 2
- (f) Convert the Hexadecimal number 8F to Binary number. i.e., $(8F)_{16} = (-----)_2$ 2
- 3Q (a) What is Write Once Run Anywhere characteristic of Java ? 1
- (b) Differentiate between a Combo Box and List Box 1
- (c) What is the difference between while and do-while looping statements ? 2
- (d) What are the primitive data types of Java ? 2
- (e) What are the various operators in Java ? 2
- (f) Write a program to check wither the person is major or minor based on given age using *conditional operator* . 2
- 4Q (a) While working in Netbeans, Ms. Lakshmi wants ensure that only one radio button is selected at a time. What properties will help her. 1
- (b) How one can make a Text Field as a Label on a Frame ? 1
- (c) The following code has error(s). Rewrite the correct code underlining all the corrections made :
Int Sum = 0 , Step = 5 , i ; 2

```

for ( i = 0 ; i < 5 , i ++ ) ;
{
    Step += 5 ,
    Sum += Step ;
}
jTextArea1 . putText ( " " + Sum )

```

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

```

if ( code == 0 )
    Week = "Sunday" ;
else if ( code == 2 )
    Week = "Tuesday" ;
else if ( code == 4 )
    Week = "Thursday " ;
else
    Week = "No Match" ;

```

2

- (e) Rewrite the following code using for 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 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 ( " Army \t Public \n School \n RK PURAM \t Half Yearly 2011 " ) ;

```

1

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

```

int x = 5 , y = 50 ;

```

1

```
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 = 200 ;  
for ( p = 20 ; p <= 22 ; 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 = 10 , b = 20 ;  
if ( ++b < 50 )  
    a * = b ;
```

2

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

```
int m = 26 ;  
m = m + 2 ;  
if ( m < 25 )  
    jTextField1 . setText ( Integer . toString ( m ) ) ;  
else  
    jTextField1 . setText ( Integer . toString ( m + 25 ) ) ;
```

2

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

```
int x , y = 0 ;  
for ( x = 1 ; x <= 15 ; ++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 ");
           break ;
case 'C' : ta1.append (" Grade C ");
case 'D' : ta1.append (" Grade D ");
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) isSelected () (ii) setSelected () (iii) getChar () (iv) getText ()

2

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

(i) Enter Team name (ii) Select Sport Type (iii) Choose number of players (iv) Save form

2

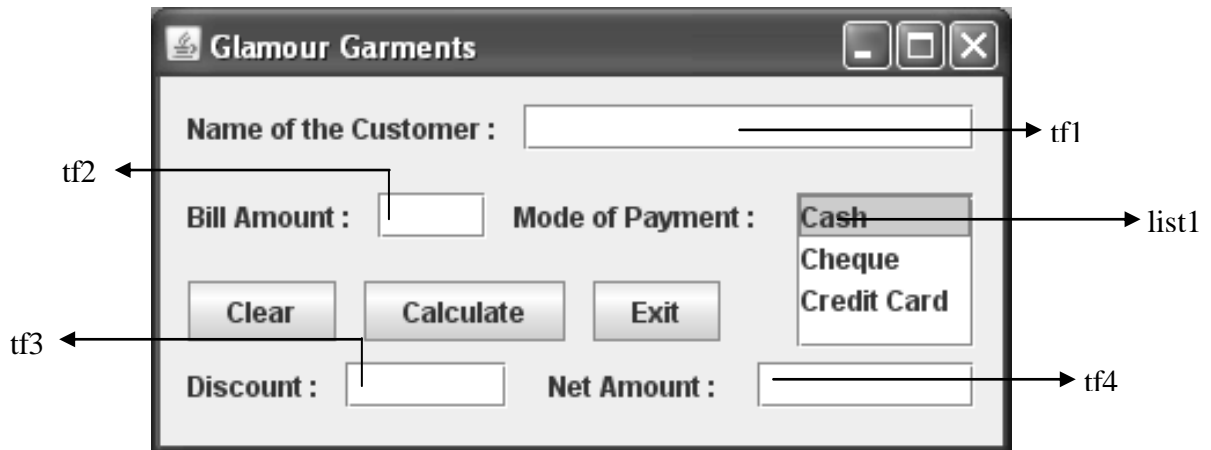
(e) Write a Java class program to print the first 10 even natural numbers using while loop.

2

(f) Write Java code that takes the total amount of pencils from jTextField1 and number of pencils from jTextField2 and calculate 20% service tax out of total amount in jTextField3. Also calculate price per pencil as total amount / number of pencils to be displayed in jTextField4.

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 list 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 text field 1

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