Test up to Conditional statement-Class-IX

FM:90 Time: 1hr. 45min

1. Choose the correct option :- [15]

i. (1==1) && (0<=0) is:
a. true b. false c. 0 d.1

ii. A new line character is:- a. '\n' b.'\t' c.'\0' d. '\f'

iii. The automatic type conversion performed by the Java compiler is known as:-
a. Implicit conversion b. Explicit conversion c. forced conversion d. type conversion

iv. Which of the following is not a keyword:- a. class b. Void c. true d. public

v. Which of the following is not a legal programming construct?
a. Sequence b. selection c. iteration d. jumping

vi.Which is the default java package? a. java.util b.java.lang c. java.awt d. java.io

vii. Which of the following is not a jump statement? a. continue b. return c. break d. System.in

viii.Which among the following Scanner methods allows us to input a number with a decimal point?
a. nextInt() b. nextFloat() c.nextDecimal() d. nextPoint()

ix. Which among of the following is the valid class name:-
a. Simple Interest b. SimpleInterest c. Simple-Interest d.1SimpleInterest

x. An operator that has two operands:- a. Unary operator b. binary operator c. ternary operator d. Operator

xi Which of the following constant are used in switch case:- a. char b. int c. double d. both a and b

xii. the return type of Math.round():- a. int b. boolean c. double d. char

xiii. give the output of the following:- Math.max(Math.ceil(-35.34),Math.floor(35.34))
a. -36.0 b. -35.0 c.36.0 d. 35.0

xiv. Which of the following Math function returns the next mathematical integer?
a. floor() b. ceil() c. abs() d. max()

xv. What will be the following output?

```
int i;
for ( i=1; i <=4; i +=2 )
 System.out.print(i+2);
```

a. 346 b.35 c.13 d.3456

2.Evaluate the following expression when the value of a=8 [2]

```
a = a - ++a + a++ +5
```

3. Write the java expression for: $x=|\sqrt{(a^3+b^2+c^4)}|$ [2]

4. Write the output of the following: System.out.println(Math.abs(Math.floor(-8.64))); [2]

5. Rewrite the following using ternary operator:- [2]

```
if(a>b)
x=10;
else
x=20;
```

6. State the output:- [2]

```
int a=100, b=200, c=300;
System.out.println(  b % c + c / a);
System.out.println((a>b)&&(c>a));
```

7. Assertion (A): Java program can be executed at any operating system smoothly. [1]
Reason (R) : Java is compiled by the compiler and converted into bytecode.
Choose the correct option for the above assertion and reason.
i. A and R both are true and R is a correct explanation to A.
ii. A and R both are true and R is not a correct explanation to A.
iii. A is false and R is true.
iv. A is true and R is false.

8. All type of conditions of if else can not be converted into switch case. Justify your answer. [1]

9. Write the output if i. ch='I' ,ii. ch='u' iii. ch='A':- [3]

```
char ch;
```

```
switch(ch)
{
case 'a ','I': System.out.print("Apple");
break;
 case 'b': System.out.print("Ball");
break;
case 'u': System.out.print("Bat");
default: System.out.println("Wrong choice");
}
```

Do all the programs using bluej(Must write Variable description table after each program):- [15 x 4 = 60]

i. A Travel Pvt ltd gives the following discount to its customer as per the given tariff:-

Ticket(in Rs)	Amount
Above 70000	18%
40001 to 70000	15%
25001 to 40000	12%
Less than 25001	5%

Write a program to take input the name and amount of the ticket for the customer and calculate the discount amount and net amount on it. Print all the information of the customer.

ii. Write a menu driven program to run the following series:-
'a' : 1 , 2 , 4, 7 , 11, 16 , 22 ,29
'b' : 100, 64, 36, 16 , 4, 0

iii. The state electricity board calculate the electricity bill for their customer according to the units consumed as per the given tariff:-

Units consumed	Charges
Upto 100 units	Rs. 1.80/-
>100 and <=300 units	Rs. 2.30/-
>300 and <=500 units	Rs.2.80/-
>500 units	Rs. 3.50/-

Write a program to take input the name of the customer in String,11 digits Consumer number in Long, month in String and total units consumed in int and calculate total bill as per the given conditions. Display all the information of the customer.

iv. Write a program to take input 3 angles of a triangle. Check whether the triangle can be possible or not [the total angles of a triangle is 180]. If possible then check whether it is an acute angle [all angles are less than 90], an obtuse angle [any one angle is more than 90 and others are less than 90] or a Right angle triangle[any one angle is 90]. Otherwise display "The triangle is not possible".
