## Class XI

## Assignment of lesson 6-9(9.4)

## MCQ Questions

1. What is the correct value to return to the operating system upon the successful completion of a program?
A. -1
B. 1
C. 0
D. Programs do not return a value.
2. What is the only function all C++ programs must contain?
A. start()
B. system()
C. main()
D. program()
3. What punctuation is used to signal the beginning and end of code blocks?
A. $\}$
B. -> and <-
C. BEGIN and END
D. ( and)
4. What punctuation ends most lines of $\mathrm{C}++$ code?
A. .
B. ;
C. :
D. '
5. Which of the following is a correct comment?
A. */ Comments */
B. ** Comment **
C. /* Comment */
D. $\{$ Comment \}
6. Which of the following is not a correct variable type?
A. float
B. real
C. int
D. double
7. Which of the following is the correct operator to compare two variables?
A. :=
B. =
C. equal
D. ==
8. Evaluate a) !(1\&\&1 || $1 \& \& 0)$
b) $22 \% 5$
9. Give an equivalent statement of following statement:- $P=2 x+3 y / 6 z$
10. Convert following if to conditional operator

If(a>b)
Lg=a;
Else
$\mathrm{Lg}=\mathrm{b}$;

$$
\begin{aligned}
& \text { If }(a>10) \\
& \quad B=a+10 ; \\
& \text { else if }(a>5) \\
& B=a+20 ; \\
& \text { else } \\
& B=a+5 ;
\end{aligned}
$$

11. Evaluate (i). $(a+5>c-2) \& \&(a-5<c+5)$ (ii). $b=++a+c++$ if $a=10$ and $c=20$
12. What will be the output of following statements:-
(i) cout $\ll a==20$; (ii) cout $\ll a>20$; if $a=30$;

## 13. Find output

\#include <iostream.h>
\#include <conio.h>
void main()
\{ clrscr();
cout <<" $\backslash \mathrm{n} * * * * * * * * * * * * *$ EVALUATION OF EXPRESSIONS********** $\ln \backslash \mathrm{n} " ;$
int $\mathrm{a}=10, \mathrm{~b}=20, \mathrm{c}=30$;
cout<<"a="<<a<<" $b=" \ll b \ll " c=" \ll c$;
int $\mathrm{z}=(\mathrm{a}++)^{*} \mathrm{c} / \mathrm{a}+\mathrm{b}$;
cout <<" $\operatorname{lnz}=(\mathrm{a}++)^{*} \mathrm{c} / \mathrm{a}+\mathrm{b} " \ll \mathrm{z}$;
getch();
cout $\ll$ Z;
clrscr();
cout <<" $\ln * * * * * * * * * * * * *$ EVALUATION OF EXPRESSIONS ${ }^{*} * * * * * * * * * * * \ln \backslash n " ;$
$a=10, b=20, c=30$;

$\mathrm{z}=++\mathrm{a} * \mathrm{c} / \mathrm{a}+\mathrm{b}$;
cout <<"\nz=++a*c/a+b = "<<z;
getch () ;
cout $\ll$ Z;
clrscr();
cout <<" $\backslash \mathrm{n} * * * * * * * * * * * * *$ EVALUATION OF EXPRESSIONS $* * * * * * * * * * * \backslash \mathrm{n} \backslash \mathrm{n} " ;$
$a=1, b=2, c=3$;
cout $\ll " \mathrm{a}=$ " $\ll \mathrm{a} \ll$ " $\mathrm{b}=" \ll \mathrm{~b} \ll$ " $\mathrm{c}=" \ll \mathrm{c}$;
$\mathrm{z}=\mathrm{b}+\mathrm{c} \% \mathrm{a}$ * ++b ;
cout<<z;
clrscr();
cout <<" $\backslash \mathrm{n} * * * * * * * * * * * * *$ EVALUATION OF EXPRESSIONS $* * * * * * * * * * * \backslash \mathrm{n} \backslash \mathrm{n} " ;$
$\mathrm{z}=45$;
int q=45;
cout $\ll$ " $\backslash \mathrm{nq}=$ " $\ll$ q;
cout<<"\n-q--="<<-q--;
cout $\ll$ " $q=$ " <<q;
getch();
clrscr();

cout <<" $\ln \backslash n z=" \ll \mathrm{z}$;
cout <<"\nz--:"<<z--;
cout <<"\n--Z:"<<--Z;
cout <<"\nz="<<z;
int qq=-- $\mathrm{z}-\mathrm{z}++$;
cout <<"\n--Z-z++ = "<<qq;
cout <<"\nz="<<z;
cout <<" $\backslash n " ;$
getch();
$\operatorname{clrscr}()$;

```
    cout <<"\n************* EVALUATION OF EXPRESSIONS ***********\n\n";
    z=45;
    cout <<"\nz="<<z;
    cout <<"\nz++:"<<z++;
    cout <<"\n++z:"<<++z;
    cout <<"\n++z+z+++ = "<<++Z+Z++;
    getch();
    clrscr();
    cout <<"\n************** EVALUATION OF EXPRESSIONS ***********\n\n";
    z=45;
    cout <<"\nz="<<z;
    cout <<"\n(++z)--:"<<(++z)--;
    cout <<"\n++z:"<<++z;
    getch();
```

\}

Q give the output of :

- cout<< $\mathrm{a}==4$;
- $2>3| | 3>5$
- $4>5 \& \& 5>6$
- $2>5| | 5>2$
- $\quad!3>4$
- $0|\mid 1$
- $0 \& \& 1$
- $4 \& \& 6>3$


## Long Answer

Q. Why main() is an important function? What will happen if the program has no main()?
Q What is the importance of iostream.h?
Q What is the purpose of header file in a program?
Q What do you understand by 'code generator'?
Q What is the importance of header file? Give header file of :
$\operatorname{cin}, \operatorname{getch}(), \operatorname{setw}(), \operatorname{pow}()$
Q What do you understand by comment entry in C++? Give example of types of comment?
Q Define Indentation.
Q Define and Give example of syntax, logical and run-time error.
Q How many ways are there in $\mathrm{C}++$ to represent an integer constant? Give example of each.
Q What are the sizes of the following constants:

1. '\a' 2. "\a" 3"Reemal’s <br> Copy" 4'9'

Q Define the following and give example:

1. Identifier
2. Literal
3. Keyword
4. Operator

Q Write a single cout statement to display the following output:
Program=20

Document=23
Logic=21
Flow chart=18
Q Write a program to accept the radius of a circle and display its area and circumference.
Q How many bytes are allocated to long int, long float and long double variable?
Q What is the difference between 33 and 33L?
Q What is a reference variable? Give example.
Q Find the error in following:

1. const int $x ; x=20$;
2. int $\mathrm{x}=3=\mathrm{b}$;
3. char ch='as';
4. int $3=\mathrm{b}$;
5. int $\& y=30$;

Q What is the order of evaluation of following expression:

1. $a>b \| b<d$
2. $a==y \& \& \quad y>m \| k<1$
3. $a>b \& \& b<c \| c<!d+3$

Q What is the result of following expression if
(i) check $=3$ cout $\ll$ !check;
(ii) check=0; cout \ll !check;
(iii) check=-3; cout $\ll$ !check;

Q What is the result of following expression $\mathrm{a}>=\mathrm{b}$ \& \& ( $\mathrm{a}+\mathrm{b} \_>\mathrm{a}$ when
(i) $a=3, b=0$
(ii) $a=7, b=7$

Q Identify the ordr of evaluation in the following expression
(i) $4 * 5+7 * 2-8 \% 3+4$
(ii) $\quad(4+5) \& \& 4 / 2-1+4| | 2-4$
(iii) $\quad(9-9) \|(4-5) \& \&(6 * 5)$

Q What will the value of $x$ if (i) ans=700, val=300 (ii) ans=800, val=700 $\mathrm{x}=(($ ans -val$)<500) ? 150: 50$

Q Given the following code fragement:
int ch=20;
cout<<++ch<<"|n"<<ch<<"|n";
(i) What will be output of following code?
(ii) What is the effect of replacing ++ch with ch++;?
(iii) What is the effect of replacing ++ ch with $\mathrm{ch}+1$;

Q What will be the result of following two expression if $\mathrm{i}=10$ intially?
(i) $\mathrm{i}_{+}+<10$
(ii) ++ i<10

Q Given the two expression
(i) val=3
(ii) $\mathrm{val}==3$
a) How are these two different?
b) What will be the resultant value of val if the initial value of val is 5 ?

