1.What will be output of the following program ?

#include<stdio.h>

void main()  
{ int i;  
clrscr();  
printf("india"-'A'+'B');  
getch();  
}

a.Run Time Error

b.ndia

c.India

d.Compile Time Error

2. What will be output of the following program ?

#include<stdio.h>

void main()  
{

clrscr();  
printf("CASSIUS"+'\11');  
getch();

}

a.;0

b. Null

c.Compile time error

d.Run Time Error

3. What will be output of the following program ?

#include<stdio.h>

void main()  
{  
int i=66,x=-3;  
clrscr();  
printf((x>0)?"%d":"%c",i);  
getch();  
}

a. 66

b. B

c.Compile Time Error

d.Run Time Error

4. #include<stdio.h>

int main()

{

printf("%d,%d\n",1<2<3,3>2>1);

return 0;

}

a.1,0

b.1,1

c.0,0

d.0,1

5. #include<stdio.h>

int main()

{

char a=256;

int b=2;

int c;

c=a+b;

printf("%d",c);

return 0;

}

a, 3

b. 2A

c. 0

d. 2

6. The output of the code below is  
#include <stdio.h>  
int a;  
void main()  
{  
if (a)  
printf(“Hello”);  
else  
printf(“world”);  
}

a) Hello  
b) World   
c) compile time error  
d) none of the mentioned

7. Which of the following cannot be used as LHS of the expression in

for (exp1 ;exp2 ; exp3) ?  
a) Variable  
b) Function  
c) typedef  
d) macros

8. What is the problem in the following declarations?  
int func(int);  
double func(int);  
int func(float);  
a) A function with same name cannot have different signatures  
b) A function with same name cannot have different return types  
c) A function with same name cannot have different number of parameters  
d) All of the mentioned

9. What does the function printf() return  
a) Number of the variables printed  
b) No of character printed  
c) No of words printed  
d) depends on the data type of the parameter

10. The keyword ‘break’ cannot be simply used within:  
a) do-while  
b) if-else  
c) for  
d) while

11. The output of the code below is

#include <stdio.h>  
void main()  
{  
int k = m();  
printf(“%d”, k);  
}

void m()  
{  
printf(“hello”);  
}  
  
a) hello5  
b) Error  
c) Nothing  
d) Garbage value

12. How many times the program will print “S” ?  
#include<stdio.h>

int main()  
{  
printf(“S”);  
main();  
return 0;  
}  
A. Infinite times  
B. 32767 times  
C. 65535 times  
D. Till stack overflows

13. What will be output of the following program  
int main()  
{  
int b[4]={5,1,32,4};  
int k,l,m;  
k=++b[1];  
l=b[1]++;  
m=b[k++];  
printf(“%d, %d, %d”,k,l,m);  
return 0;  
}  
a) 2, 2, 4  
b) 3, 2, 32  
c) 3, 2, 4  
d) 2, 3, 32

14. What will be output of the following program  
int main()  
{  
int arr[4]={3,4,5,6};  
int k[4];  
k=arr;  
printf(“%d\n”,k[1]);  
}  
a) Compile Time Error  
b) 4  
c) No output  
d) Program crashes

15. What is the output of this C code?

#include <stdio.h>  
void main()  
{  
static int x = 3;  
x++;  
if (x <= 5)  
{  
printf(“hello”);  
main();  
}  
}  
a) Run time error  
b) hello  
c) Infinite hello  
d) hellohello

16.  The output of this C code is?

#include <stdio.h>  
void main()  
{  
int i = 0;  
if (i == 0)  
{  
printf(“Hello”);  
break;  
}  
}  
a) Hello is printed infinite times  
b) Hello  
c) Varies  
d) Compile time error

17. The output of this C code is?

#include <stdio.h>  
void main()  
{  
double x = 0;  
for (x = 0.0; x < 3.0; x++)  
printf(“Hello”);  
}  
a) Run time error  
b) Hello is printed thrice  
c) Hello is printed twice  
d) Hello is printed infinitely

18. A memory leak happens when  
a) a program allocates memory in heap but forgets to be allocate it  
b) when an un-assigned pointer is used is freed using free function  
c) when realloc() is called on a pointer that is not allocated  
d) A program allocates memory in stack

19. Where the local variable is stored ?  
a) Disk  
b) Stack  
c) Heap  
d) Register

20. Which of the following indicate the end of file ?  
a) feof()  
b) EOF  
c) Both feof() and EOF  
d) None of the mentioned

**C++\_SET A**

**1)    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a member function that is declared within a base class and redefined by derived class.**

**a. virtual function**   
**b.** static function   
**c.** friend function  
**d.** const member function

**2)   When a base class is privately inherited by the derived class, then\_\_\_\_\_\_\_\_\_\_\_\_\_ .**

**a.** protected members of the base class become private members of derived class  
**b.** public members of the base class become private members of derived class  
**c. both a and b**  
**d.** only b

**3)   When a class is defined inside any function or block, it is called \_\_\_\_\_\_\_\_\_\_\_ .**

**a.** Nested class   
**b.** Block class   
**c. Local class**   
**d.** It is not possible

**4)   Default values for a function are specified when \_\_\_\_ .**

**a.** function is defined  
**b. function is declared**  
**c.** Both a and b  
**d.** None of these

**5)   In any ways, Non-member function cannot have access to the private data of the class.**

**a.** True  
**b. False**

**6)   While redefining a virtual function in the derived class, if its prototype is changed then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .**

a. It will be overloaded by the compiler  
b. Its virtual nature will be lost  
**c. both a and b**   
d. Compiler will generate “Prototype mismatch error”

**7)   In a program, If there exists a function template with two parameters and normal function say void add(int , int), so add(3,4) will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .**

**a.** Invoke function template body as it is generic one  
**b.** **Invokes normal function as it exactly matches with its prototype**   
**c.** Not be called and Compiler issues warning  
**d.** Not be called and Compiler issues ambiguity in calling add()

**8) Predict the output**

#include<iostream>

using namespace std;

int main(){

int i=1;

i=2+2\*i++;

cout<<i;

return 0;

}

a. 6  
b. 8   
**c. 5**   
d. 4

**9)Predict the output**

#include<iostream>

using namespace std;

class Test

{

    int value;

public:

    Test(int v = 0) { value = v; }

    int getValue()  { return value; }

};

int main()

{

    const Test t;

    cout << t.getValue();

    return 0;

}

a. Runtime Error  
**b. Compile Time Error**  
c. 0   
d. Garbage Value

**10) What is the output of the following program?**

|  |
| --- |
| #include <iostream>  using std::cout;  int main()  {      cout << 5 ["SmartTrainingResource"];      return 0;  } |

a. Smart  
**b. T**  
c. rainingResource  
d. compile error

**11) Find the output of the following program**

#include<iostream>

using namespace std;

int main()

{

int a= 36;

cout<<(a<<2>>3);

return 0;

}

**a.18**

b.16

c.20

d.19

**12)Predict Output**

#include<iostream>

using namespace std;

class Test

{

private:

int marks=85;

public:

Test(int marks)

{

cout<<this->marks;

cout<<endl;

}

};

int main()

{

Test t(95);

return 0;

}

a.95

**b.85**

c.0

d.Compiler Error

**13)Predict the output**

class A

{

public:

int x=20;

};

class B

{

public:

int x=10;

};

int main()

{

A obj1;

B obj2;

obj1=obj2;

cout<<obj1.x<<endl;

return 0;

}

a.20

b.Runtime Error

**c.Compile Error**

d.10

**14)Predict the output**

class A{

public:

A()

{

func();

}

~A()

{

func();

}

void func()

{

cout<<3;

}

void fun()

{

func();}

};

class B:public A

{

void func()

{

cout<<2;

}

};

int main()

{

B b;

b.fun();

return 0;

}

a.2

b.3

c.23

**d.333**

**15)Predict the output**

#include<iostream>

using namespace std;

int main()

{

char arr[8];

int i;

for(i=0;i<10;i++)

\*(arr+i)=65+i;

cout<<arr;

return 0;

}

a.Array Index out of bound Error

b.656667686970717271

**c.ABCDEFGHI**

d.ABCDEFGHIJ

**16)Predict the output in a 32 bit processor**

#include<iostream>

using namespace std;

class base{

int arr[10];

};

class b1:public base{};

class derived:public base;public b1{};

int main()

{

cout<<sizeof(derived);

return 0;

}

a.40

b.4

**c.80**

d.8

**17)Predict the output**

#include<iostream>

using namespace std;

int &fun() {

  static int a = 10;

  return a;

}

int main() {

  int &y = fun();

  y = y +30;

  cout<<fun();

  return 0;

}

a.11

b.Garbage value

**c.40**

d.30

**18)Predict the output**

#include<iostream>

using namespace std;

class Test

{

public:

  Test();

};

Test::Test()  {

    cout<<"Constructor Called ";

}

int main()

{

    cout<<"Start ";

    Test t1();

    cout<<"End ";

    return 0;

}

**a.Start End**

b.StartConstructor CalledEnd

c.Compiler Error

d.Start Constructor Called End

**19)Predict the output**

#include <iostream>

using namespace std;

int array1[] = { 1200, 200, 2300, 1230, 1543 };

int array2[] = { 12, 14, 16, 18, 20 };

int i, result = 0;

int main()

{

    for (i = 0; i< 5; i++) {

        result += array1[i];

    }

    for (i = 0; i < 4; i++) {

        result += array2[i];

    }

    cout << result;

    return 0;

}

a.1563

**b.6533**

c.80

d.38

**18)Predict the Output**

#include <iostream>

using namespace std;

int main()

{

int a = 5, b = 10, c = 15;

int arr[3] = { &a, &b, &c };

cout << \*arr[\*arr[1] - 8];

return 0;

}

**a.Compile Error**

b.Run time Error

c.-327

d.51015

**19)Predict the output**

#include <iostream>

using std::cout;

int main()

{

    int i = 0;

    cout << (i = 0 ? 1 : 2 ? 3 : 4);

    return 0;

}

a. 1  
b. 2  
**c. 3**  
d. 4  
e. compile error

**20)Predict the output**

|  |
| --- |
| #include <iostream>  using std::cout;  int main()  {      int i = 0, j = 0, k;      i++;      j++ ++;      k = (i++) + j;      cout << i;      cout << j;      cout << k;      return 0;  } |

a. 123  
b. 124  
c. 224  
**d. Compile Error**

**JAVA\_SET A**

1. Given the code fragment:

String valid = "true"; if (valid) System.out.println("valid");

else System.out.println("not valid");

What is the result?

A. Valid

B. Not valid

**C. Compilation fails**

D. An IllegalAgumentException is thrown at run time

2. Int [][] array = {(0), (0, 1), (0, 2, 4), (0, 3, 6, 9}, (0, 4, 8, 12, 16}}; System.out.println(array [4] [1]); System.out.println (array [1] [4]);

What is the result?

A.

4

Null

B.

Null

4

C.

An IllegalArgumentException is thrown at run time

**D.**

**4**

**An ArrayIndexOutOfBoundException is thrown at run time**

3. public class DoComparel { public static void main(String[] args) { String[] table = ("aa", "bb", "cc"); for (String ss: table) { int ii = 0; while(ii < table.length) { System.out.println(ss + ", " + ii); ii++;

}

}

}

}

How many times is 2 printed as a part of the output?

**A. Zero**

B. Once

C. Twice

D. Thrice

E. Compilation fails.

Anwer: A

4. class X { String str = "default"; X(String s) { str = s; } void print() { System.out.println(str); } public static void main(String[] args) { new X("hello").print(); }

}

What is the result?

**A. Hello**

B. Default

C. Compilation fails

D. The program prints nothing

E. An exception is thrown at run time

5. public class SampleClass public static void main(String[] args) AnotherSampleClass asc = new AnotherSampleClass(); SampleClass sc = new SampleClass(); //insert code here } } class AnotherSampleClass extends SampleClass {}

Which statement, when inserted into line 5, is valid change?

1. asc.= sc; **B. sc =asc** C. asc= (object) sc; D. asc= sc.clone ()

6. Given the code fragment

System.out.println(" Result: " + 2 +3 + 5);

System.out.println (“Result: " + 2 + 3 \* 5);

What is the result?

1. Result: 10

Result: 30

1. Result: 10

Result: 25

1. **Result: 235**

**Result: 215**

1. Result: 215

Result: 215

7. Given the code fragment:

int a = 0;

a++;

System.out.println (a++);

System.out.println(a);

What is the result?

1. **1 2**
2. 0 1
3. 1 1
4. 2 2

8. Given:

public class X

{

public static void main(String[] args)

String theString = "Hello World";

System.out.println(theString.charAt(11));

}

}

What is the result?

1. There is no output
2. d is output
3. **A StringIndexOutOfBoundsException is thrown at runtime**
4. An ArrayIndexOutOfBoundsException is thrown at runtime

9. Given:

String message1= "Wham bam!";

String message2 = new String("Wham bam!");

if (message1 == message2)

System.out.println("They match");

if (message1.equals(message2))

System.out.println("They really match");

What is the result?

1. They match

They really match

1. **They really match**
2. They match
3. Nothing Prints

10. Given the code fragment

System.out.println ("Result:" +3+5);

System.out.println ("Result " + (3+5));

What is the result?

1. Result: 8

Result: 8

1. **Result: 35**

**Result: 8**

1. Result: 8

Result: 35

1. Result: 35

Result: 35

11. Given the code fragment:

String color = "Red";

switch (color) case "Red": System.out.println("Found Red"); case "Blue": System.out.println("Found Blue"); break; case "White": System.out.println("Found White"); break; default: System.out.println("Found Default");

}

What is the result?

1. Found Red
2. **Found Red**

**Found Blue**

1. Found Red

Found Blue

Found White

1. Found Red

Found Blue  
Found White

Found Default

12. Which two may precede the word ‘class’ in a class declaration?

A. local & public

**B. public & static**

C. volatile & static

B. public & volatile

13. Given:

class X{} class Y {Y 0 {} } class Z{Z(int i)){}}

Which class has a default constructor?

**A. X only**

B. Yonly

C. Z only

D. X and Y

14. public static void main(String[] args) { int a, b, c = 0; int a, b, c; int g, int h, int i = 0; int d, e, F; Int k, l, m = 0;

Which two declarations will compile?

1. **int a, b, c = 0;**
2. int a, b, c;
3. int g, int h, int i = 0;
4. int k, l, m; = 0;

15. Which statement initializes a stringBuilder to a capacity of 128?

A. StringBuilder sb = new String ("128");

B. StringBuilder sb = StringBuilder.setCapacity(128);

C. StringBuilder sb = StringBuilder.getInstance (128);

**D. StringBuilder sb = new StringBuilder(128);**

16. public class DoCompare4 { public static void main (String[] args){ String [] table = {“aa”,”bb”,”cc”}; int ii=0; do while (ii < table. length) System. out . println (ii++) ; while (ii < table . length) ;

What is the result?

A. 0

**B. 0 1 2**

C. 0 1 2 0 1 2 0 1 2

D. Compilation fails

17. Given the fragment: int[] array = {1,2,3,4,5};System. arraycopy (array, 2, array, 1, 2,); System. out . print (array[1]) ; System. out .print (array [4]); What is the result?

A. 24

B. 25

C. 34

**D 35**

18. Which of these keywords is used to generate an exception explicitly?

1. try
2. finally
3. **throw**
4. catch

19. What is multithreaded programming?

a. It’s a process in which two different processes run simultaneously

**b. it’s a process in which two or more parts of same process run simultaneously**

c. it’s a process in which many different process are able to access same information

d. It’s a process in which a single process can access information from many sources

20. Which of the following is a method having same name as that of it’s class?

a. finalize

b. delete

c. class

d. **constructor**