1. What happens if the following C++ statement is compiled and executed?

int \*ptr = NULL;

delete ptr;

1. The program is not semantically correct  
   b) The program is compiled and executed successfully  
   c) The program gives a compile-time error  
   d) The program compiled successfully but throws an error during run-time

Answer: b

1. What will be the output of the following C++ code

#include <iostream>

#include <string>

using namespace std;

int main(int argc, char const \*argv[])

{

char s1[6] = "Hello";

char s2[6] = "World";

char s3[12] = s1 + " " + s2;

cout<<s3;

return 0;

}

1. Hello  
   b) World  
   c) Error  
   d) Hello World

Answer: c

1. What happens if the following program is executed in C and C++?

#include <stdio.h>

int main(void)

{

int new = 5;

printf("%d", new);

}

. a) Error in C and successful execution in C++  
b) Error in both C and C++  
c) Error in C++ and successful execution in C  
d) A successful run in both C and C++

Answer: c

1. What happens if the following program is executed in C and C++?

#include <stdio.h>

void func(void)

{

printf("Hello");

}

void main()

{

func();

func(2);

}

1. Outputs Hello twice in both C and C++  
   b) Error in C and successful execution in C++  
   c) Error in C++ and successful execution in C  
   d) Error in both C and C++

Answer: d

1. What will be the output of the following C++ code?

#include <iostream>

#include <string>

#include <algorithm>

using namespace std;

int main()

{

string s = "spaces in text";

s.erase(remove(s.begin(), s.end(), ' ' ), s.end() ) ;

cout << s << endl;

}

1. spacesintext  
   b) spaces in text  
   c) spaces  
   d) spaces in

Answer: a

1. Which of the following C++ code will give error on compilation?

================code 1=================

#include <iostream>

using namespace std;

int main(int argc, char const \*argv[])

{

cout<<"Hello World";

return 0;

}

========================================

================code 2=================

#include <iostream>

int main(int argc, char const \*argv[])

{

std::cout<<"Hello World";

return 0;

}

========================================

1. Code 1 only  
   b) Neither code 1 nor code 2  
   c) Both code 1 and code 2  
   d) Code 2 only

Answer: b

1. What is the value of p in the following C++ code snippet?

#include <iostream>

using namespace std;

int main()

{

int p;

bool a = true;

bool b = false;

int x = 10;

int y = 5;

p = ((x | y) + (a + b));

cout << p;

return 0;

}

a) 12  
b) 0  
c) 2  
d) 16

Answer: d

8. What will be the output of the following C++ function?

1. int main()
2. {
3. register int i = 1;
4. int \*ptr = &i;
5. cout << \*ptr;
6. return 0;
7. }

a) Runtime error may be possible  
b) Compiler error may be possible  
c) 1  
d) 0

Answer: b

9. What will be the output of the following C++ code?

#include<iostream>

using namespace std;

int main ()

{

int cin;

cin >> cin;

cout << "cin: " << cin;

return 0;

}

a) Segmentation fault  
b) Nothing is printed  
c) Error  
d) cin: garbage value

Answer: d

10. What will be the output of the following C++ program?

#include <iostream>

#include <string>

#include <cstring>

using namespace std;

int main(int argc, char const \*argv[])

{

const char \*a = "Hello**\0**World";

cout<<a;

return 0;

}

a) Hello  
b) World  
c) Error  
d) Hello World  
View Answer

Answer: a

11.  What will be the output of the following C++ code?

#include <iostream>

using namespace std;

int main()

{

char c = 74;

cout << c;

return 0;

}

a) I  
b) J  
c) A  
d) N  
View Answer

Answer: b

12. What will be the output of the following C++ program?

#include <iomanip>

#include <iostream>

using namespace std;

int main()

{

cout << setprecision(17);

double d = 0.1;

cout << d << endl;

return 0;

}

1. compile time error  
   b) 0.100001  
   c) 0.11  
   d) 0.10000000000000001

Answer: d

13. What is the correct syntax of accessing a static member of a class in C++?

---------------------------

Example class:

class A

{

public:

static int value;

}

---------------------------

a) A->value  
b) A^value  
c) A.value  
d) A::value  
View Answer

Answer: d

14. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

int main()

{

int a = 5;

float b;

cout << sizeof(++a + b);

cout << a;

return 0;

1. }

a) 2 5  
b) 4 5  
c) 4 6  
d) 2 6

Answer: b

15. What will be the output of the following C++ program?

#include<iostream>

using namespace std;

int main()

{

int a = 5;

auto check = [=]()

{

a = 10;

};

check();

cout<<"Value of a: "<<a<<endl;

return 0;

}

a) Segmentation fault  
b) Value of a: 5  
c) Value of a: 10  
d) Error

Answer: d

16. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

void square (int \*x, int \*y)

{

\*x = (\*x) \* --(\*y);

}

int main ( )

{

int number = 30;

square(&number, &number);

cout << number;

return 0;

}

a) 30  
b) Error  
c) Segmentation fault  
d) 870

Answer: d

17. What will be the output of the following C++ program?

#include <iostream>

#include <string>

using namespace std;

int main ()

{

std::string str ("PGDAC.");

str.back() = '!';

std::cout << str << endl;

return 0;

}

a) PGDAC!  
b) PGDAC!.  
c) PGDAC.  
d) PGDAC.!

Answer: a

18. What will be the output of the following C++ program?

#include <iostream>

using namespace std;

int main()

{

int n = 5;

void \*p = &n;

int \*pi = static\_cast<int\*>(p);

cout << \*pi << endl;

return 0;

1. }

a) 5  
b) 6  
c) compile time error  
d) runtime error

Answer: a

19. What will be the output of the following C++ program?

#include <iostream>

using namespace std;

int main()

{

try

{

try

{

throw 20;

}

catch (int n)

{

cout << "Inner Catch**\n**";

throw;

}

}

catch (int x)

{

cout << "Outer Catch**\n**";

}

return 0;

}

a) Outer Catch  
b)Inner Catch

Outer Catch

c) Error  
d) Inner Catch

Answer: b

20. What will be the output of the following C++ code snippet?

#include <iostream>

using namespace std;

int operate (int a, int b)

{

return (a \* b);

}

float operate (float a, float b)

{

return (a / b);

}

int main()

{

int x = 5, y = 2;

float n = 5.0, m = 2.0;

cout << operate(x, y) <<"**\t**";

cout << operate (n, m);

return 0;

}

a) 10.0 5  
b) 10 2.5  
c) 10.0 5.0  
d) 5.0 2.5

Answer: b

21. What will be the output of the following C++ code?

1. #include <iostream>
2. using namespace std;
3. int main ()
4. {
5. int a, b, c;
6. a = 2;
7. b = 7;
8. c = (a > b) ? a : b;
9. cout << c;
10. return 0;
11. }

a) 12  
b) 14  
c) 6  
d) 7

Answer: d

22. What will be the output of the following C++ code snippet?

#include <stdio.h>

#include<iostream>

using namespace std;

int main ()

{

int array[] = {0, 2, 4, 6, 7, 5, 3};

int n, result = 0;

for (n = 0; n < 8; n++)

{

result += array[n];

}

cout << result;

return 0;

}

a) 21  
b) 27  
c) 26  
d) 25

Answer: b

23. What will be the output of the following C++ program?

#include <iostream>

#include <string>

using namespace std;

int main ()

{

string str ("Hello Students");

for (size\_t i = 0; i < str.length();)

{

cout << str.at(i-1);

}

return 0;

}

1. runtime error  
   b) Hello   
   c) H  
   d) Hello Stude

Answer: a

24. What will be the output of the following C++ program?

#include <iostream>

using namespace std;

class A{

public:

A(){

cout<<"Constructor called**\n**";

}

~A(){

cout<<"Destructor called**\n**";

}

};

int main(int argc, char const \*argv[])

{

A \*a = new A[5];

delete[] a;

return 0;

}

a) Segmentation fault  
b) “Constructor called” five times and then “Destructor called” five times  
c) “Constructor called” five times and then “Destructor called” once  
d) Error

Answer: b

25. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class polygon

{

protected:

int width, height;

public:

void set\_values (int a, int b)

{

width = a; height = b;}

};

class output1

{

public:

void output (int i);

};

void output1::output (int i)

{

cout << i << endl;

}

class rectangle: public polygon, public output1

{

public:

int area ()

{

return (width \* height);

}

};

class triangle: public polygon, public output1

{

public:

int area ()

{

return (width \* height / 2);

}

};

int main ()

{

rectangle rect;

triangle trgl;

rect.set\_values (4, 5);

trgl.set\_values (4, 5);

rect.output (rect.area());

trgl.output (trgl.area());

return 0;

}

a) 20  
b) 10  
c)

20

10

d) 30  
View Answer

Answer: c

26. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class Base

{

public:

virtual void print() const = 0;

};

class DerivedOne : public Base

{

public:

void print() const

{

cout << "DerivedOne**\n**";

}

};

class DerivedTwo : public Base

{

public:

void print() const

{

cout << "DerivedTwo**\n**";

}

};

class Multiple : public DerivedOne, public DerivedTwo

{

public:

void print() const

{

DerivedTwo :: print();

}

};

int main()

{

int i;

Multiple both;

DerivedOne one;

DerivedTwo two;

Base \*array[ 3 ];

array[ 0 ] = &both;

array[ 1 ] = &one;

array[ 2 ] = &two;

array[ i ] -> print();

return 0;

}

a) DerivedOne  
b) DerivedTwo  
c) Error  
d) DerivedThree

Answer: c

27. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class student

{

public:

int rno , m1 , m2 ;

void get()

{

rno = 15, m1 = 10, m2 = 10;

}

};

class sports

{

public:

int sm;

void getsm()

{

sm = 10;

}

};

class statement:public student,public sports

{

int tot,avg;

public:

void display()

{

tot = (m1 + m2 + sm);

avg = tot / 3;

cout << tot;

cout << avg;

}

};

int main()

{

statement obj;

obj.get();

obj.getsm();

obj.display();

}

a) 3100  
b) 3010  
c) 2010  
d) 1010

Answer: b

28. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

struct a

{

int count;

};

struct b

{

int\* value;

};

struct c : public a, public b

{

};

int main()

{

c\* p = new c;

p->value = 0;

cout << "Inherited";

return 0;

}

a) Inherited  
b) Error  
c) Runtime error  
d) inherited

Answer: a

29. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class Base1

{

protected:

int SampleDataOne;

public:

Base1()

{

SampleDataOne = 100;

}

~Base1()

{

}

int SampleFunctOne()

{

return SampleDataOne;

}

};

class Base2

{

protected:

int SampleDataTwo;

public:

Base2()

{

SampleDataTwo = 200;

}

~Base2()

{

}

int SampleFunctTwo()

{

return SampleDataTwo;

}

};

class Derived1 : public Base1, public Base2

{

int MyData;

public:

Derived1()

{

MyData = 300;

}

~Derived1()

{

}

int MyFunct()

{

return (MyData + SampleDataOne + SampleDataTwo);

}

};

int main()

{

Base1 SampleObjOne;

Base2 SampleObjTwo;

Derived1 SampleObjThree;

cout << SampleObjThree.Base1 :: SampleFunctOne() << endl;

cout << SampleObjThree.Base2 :: SampleFunctTwo() << endl;

return 0;

}

a) 100  
b) 200  
c) Both 100 & 200  
d) 150

Answer: c

30. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class X

{

public:

int a;

void f(int b)

{

cout<< b << endl;

}

};

int main()

{

int X :: \*ptiptr = &X :: a;

void (X :: \* ptfptr) (int) = &X :: f;

X xobject;

xobject.\*ptiptr = 10;

cout << xobject.\*ptiptr << endl;

(xobject.\*ptfptr) (20);

}

a) 10

20

b)

20

10

1. 20  
   d) 10  
   Answer: a

31.

What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class Testpm

{

public:

void m\_func1()

{

cout << "func1**\n**";

}

int m\_num;

};

void (Testpm :: \*pmfn)() = &Testpm :: m\_func1;

int Testpm :: \*pmd = &Testpm :: m\_num;

int main()

{

Testpm ATestpm;

Testpm \*pTestpm = new Testpm;

(ATestpm.\*pmfn)();

(pTestpm ->\* pmfn)();

ATestpm.\*pmd = 1;

pTestpm ->\* pmd = 2;

cout << ATestpm.\*pmd << endl

<< pTestpm ->\* pmd << endl;

}

a) func1  
b)

func1

func1

c)

1

2

d)

func1

func1

1

2

Answer: d

32. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class bowl

{

public:

int apples;

int oranges;

};

int count\_fruit(bowl \* begin, bowl \* end, int bowl :: \*fruit)

{

int count = 0;

for (bowl \* iterator = begin; iterator != end; ++ iterator)

count += iterator ->\* fruit;

return count;

}

int main()

{

bowl bowls[2] = {{ 1, 2 },{ 3, 5 }};

cout << "I have " << count\_fruit(bowls, bowls + 2, & bowl :: apples) << " apples**\n**";

cout << "I have " << count\_fruit(bowls, bowls + 2, & bowl :: oranges) << " oranges**\n**";

return 0;

}

a)

I have 4 apples

I have 7 oranges

b)

I have 3 apples

I have 5 oranges

c)

I have 1 apples

I have 5 oranges

d)

I have 1 apples

I have 7 oranges

Answer: a

33. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class Foo

{

public:

Foo(int i = 0){ \_i = i;}

void f()

{

cout << "Executed"<<endl;

}

private:

int \_i;

};

int main()

{

Foo \*p = 0;

p -> f();

}

a) Executed  
b) Error  
c) Runtime error  
d) 10

Answer: a

34. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class student

{

public:

int rno , m1 , m2 ;

protected:

void get()

{

rno = 15, m1 = 10, m2 = 10;

}

};

class sports

{

public:

int sm;

void getsm()

{

sm = 10;

}

};

class statement : public student, public sports

{

int tot, avg;

public:

void display()

{

tot = (m1 + m2 + sm);

avg = tot / 3;

cout << tot;

cout << avg;

}

void setObject()

{

get();

}

};

int main()

{

statement obj;

obj.setObject();

obj.getsm();

obj.display();

}

a) 3010  
b) 1010  
c) 2100  
d) Error

Answer: a

35. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

struct A

{

int i;

char j;

float f;

void func();

};

void A :: func() {}

struct B

{

public:

int i;

char j;

float f;

void func();

};

void B :: func() {}

int main()

{

A a; B b;

a.i = b.i = 1;

a.j = b.j = 'c';

a.f = b.f = 3.14159;

a.func();

b.func();

cout << "Allocated";

return 0;

}

a) Allocated  
b) Error  
c) 3.14159  
d) 1

Answer: a

36. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

struct A

{

private:

int i, j, k;

public:

int f();

void g();

};

int A :: f()

{

return i + j + k;

}

void A :: g()

{

i = j = k = 0;

}

class B

{

int i, j, k;

public:

int f();

void g();

};

int B :: f()

{

return i + j + k;

}

void B :: g()

{

i = j = k = 0;

}

int main()

{

A a;

B b;

a.f();

a.g();

b.f();

b.g();

cout << "Identical results would be produced";

}

a) 50  
b) Identical results would be produced  
c) Error  
d) Runtime error

Answer: b

37. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class Cat

{

public:

int age;

int weight;

};

int main()

{

Cat f;

f.age = 56;

cout << "Gates is " ;

cout << f.age << " years old.**\n**";

1. }

a) Gates is  
b) Gates is 56 years old  
c) Error  
d) Gates is 53 years old

Answer: b

38. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

struct X;

struct Y

{

void f(X\*);

};

struct X

{

private:

int i;

public:

void initialize();

friend void g(X\* , int);

friend void Y :: f(X\*);

friend struct Z;

friend void h();

};

void X :: initialize()

{

i = 0;

}

void g(X\* x, int i)

{

x -> i = i;

}

void Y :: f(X \* x)

{

x -> i = 47;

cout << x->i;

}

struct Z

{

private:

int j;

public:

void initialize();

void g(X\* x);

};

void Z::initialize()

{

j = 99;

}

void Z::g(X\* x)

{

x -> i += j;

}

void h()

{

X x;

x.i = 100;

cout << x.i;

}

int main()

{

X x;

Z z;

z.g(&x);

cout << "Data accessed";

}

a) 99  
b) 47  
c) Data accessed  
d) 67

Answer: c

39. 1. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class A

{

static int a;

public:

void show()

{

a++;

cout<<"a: "<<a<<endl;

}

};

int A::a = 5;

int main(int argc, char const \*argv[])

{

A a;

return 0;

}

a) Error as a private member a is referenced outside the class  
b) Segmentation fault  
c) No output  
d) Program compiles successfully but gives run-time error

Answer: c

40.  What happens when objects s1 and s2 are added?

string s1 = "Hello";

string s2 = "World";

string s3 = (s1+s2).substr(5);

a) Error because s1+s2 will result into string and no string has substr() function  
b) Segmentation fault as two string cannot be added in C++  
c) The statements runs perfectly  
d) Run-time error

Answer: c

41. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class A

{

static int a;

public:

A()

{

cout<<"Object of A is created**\n**";

}

void show()

{

a++;

cout<<"a: "<<a<<endl;

}

};

class B

{

public:

};

int main(int argc, char const \*argv[])

{

A a1, a2;

A a3 = a1 + a2;

return 0;

}

a) Runs perfectly  
b) Run-time Error  
c) Segmentation fault  
d) Compile-time Error

Answer: d

42. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class A

{

static int a;

public:

void show()

{

a++;

cout<<"a: "<<a<<endl;

}

void operator.()

{

cout<<"Objects are added**\n**";

}

};

class B

{

public:

};

int main(int argc, char const \*argv[])

{

A a1, a2;

return 0;

}

a) Run-time Error  
b) Runs perfectly  
c) Segmentation fault  
d) Compile-time error

Answer: d

43. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class complex

{

int i;

int j;

public:

complex(int a, int b)

{

i = a;

j = b;

}

complex operator+(complex c)

{

complex temp;

temp.i = this->i + c.i;

temp.j = this->j + c.j;

return temp;

}

void show(){

cout<<"Complex Number: "<<i<<" + i"<<j<<endl;

}

};

int main(int argc, char const \*argv[])

{

complex c1(1,2);

complex c2(3,4);

complex c3 = c1 + c2;

c3.show();

return 0;

}

a) 4 + i6  
b) 2 + i2  
c) Error  
d) Segmentation fault

Answer: c

44. What will be the output of the following C++ code?

 What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class complex

{

int i;

int j;

public:

complex(){}

complex(int a, int b)

{

i = a;

j = b;

}

complex operator+(complex c)

{

complex temp;

temp.i = this->i + c.i;

temp.j = this->j + c.j;

return temp;

}

void show(){

cout<<"Complex Number: "<<i<<" + i"<<j<<endl;

}

};

int main(int argc, char const \*argv[])

{

complex c1(1,2);

complex c2(3,4);

complex c3 = c1 + c2;

c3.show();

return 0;

}

a) Complex Number: 4 + i6  
b) Complex Number: 2 + i2  
c) Error  
d) Segmentation fault

Answer: a

45.  What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class Box

{

int capacity;

Box(){}

Box(double capacity){

this->capacity = capacity;

}

};

int main(int argc, char const \*argv[])

{

Box b1(10);

Box b2 = Box(14);

return 0;

}

a) Error  
b) Segmentation fault  
c) 4  
d) No output

Answer: a

46. What will be the output of the following C++ code?

 What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class rect

{

int x, y;

public:

void val (int, int);

int area ()

{

return (x \* y);

}

};

void rect::val (int a, int b)

{

x = a;

y = b;

}

int main ()

{

rect rect;

rect.val (3, 4);

cout << "rect area: " << rect.area();

return 0;

}

a) rect area: 24  
b) rect area: 12  
c) compile error because rect is as used as class name and variable name in line #20  
d) rect area: 56  
View Answer

Answer: b

47. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class CDummy

{

public:

int isitme (CDummy& param);

};

int CDummy::isitme (CDummy& param)

{

if (&param == this)

return true;

else

return false;

}

int main ()

{

CDummy a;

CDummy \*b = &a;

if (b->isitme(a))

{

cout << "execute";

}

else

{

cout<<"not execute";

}

return 0;

}

a) execute  
b) not execute  
c) error  
d) both execute & not execute

Answer: a

48. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

int main()

{

typedef int num;

num a = 10, b = 15;

num c = a + b + a - b;

cout << c;

return 0;

}

a) 20  
b) 15  
c) 30  
d) 25

Answer: a

49. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

int main()

{

int i;

enum month

{

JAN,FEB,MAR,APR,MAY,JUN,JUL,AUG,SEP,OCT,DEC

};

for (i = JAN; i <= DEC; i++)

cout << i;

return 0;

}

a) 012345678910  
b) 0123456789  
c) 01234567891011  
d) 01234567891011122

Answer: a

50. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

int main()

{

typedef int num;

typedef char let;

let w = "steve";

num a = 10, b = 15;

num c = a + w;

cout << c;

return 0;

}

a) 10steve  
b) steve10  
c) compile time error  
d) compile but not run

Answer: c

51.  What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class Box

{

public :

double length;

double breadth;

double height;

};

int main( )

{

Box Box1;

double volume;

Box1.height = 5;

Box1.length = 6;

Box1.breadth = 7.1;

volume = Box1.height \* Box1.length \* Box1.breadth;

cout << "Volume of Box1 : " << volume <<endl;

return 0;

}

a) 210  
b) 213  
c) 215  
d) 217

Answer: b

52. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class Rect

{

int x, y;

public:

void set\_values (int,int);

int area ()

{

return (x \* y);

}

};

void Rect::set\_values (int a, int b)

{

x = a;

y = b;

}

int main ()

{

Rect recta, rectb;

recta.set\_values (5, 6);

rectb.set\_values (7, 6);

cout << "recta area: " << recta.area();

cout << "rectb area: " << rectb.area();

return 0;

}

a) recta area: 30 rectb area: 42  
b) recta area: 20 rectb area: 34  
c) recta area: 30 rectb area: 21  
d) recta area: 30 rectb area: 33

Answer: a

53. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class sample

{

private:

int var;

public:

void input()

{

cout << var;

}

void output()

{

cout << "Variable entered is ";

cout << var << "**\n**";

}

};

int main()

{

sample object;

object.input();

object.output();

object.var();

return 0;

}

a)

Enter an integer 5

Variable entered is 5

b) Runtime error  
c) Error  
d)

Enter an integer 7

Variable entered is 7

Answer: c

54.  What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class number

{

int i;

public:

int geti();

void puti(int j);

};

int number::geti()

{

return i;

}

void number::puti(int j)

{

i = j;

}

int main()

{

number s;

s.puti(10);

cout << s.geti( );

return 0;

1. }

a) 10  
b) 11  
c) 20  
d) 22

Answer: a

55. What will be the output of the following C++ code?

#include <iostream>

#include <fstream>

using namespace std;

int main ()

{

int length;

char \* buffer;

ifstream is;

is.open ("sample.txt", ios :: binary );

is.seekg (0, ios :: end);

length = is.tellg();

is.seekg (0, ios :: beg);

buffer = new char [length];

is.read (buffer, length);

is.close();

cout.write (buffer, length);

delete[] buffer;

return 0;

1. }

a) This is sample  
b) sample  
c) Error  
d) Runtime error

Answer: d

56. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

int main ()

{

char first, second;

cout << "Enter a word: ";

first = cin.get();

cin.sync();

second = cin.get();

cout << first << endl;

cout << second << endl;

return 0;

1. }

a) first  
b) second  
c) returns first 2 letter or number from the entered word  
d) third

Answer: c

57. What will be the output of the following C++ code?

#include<iostream>

#include <fstream>

using namespace std;

int main ()

{

ofstream outfile ("test.txt");

for (int n = 0; n < 100; n++)

{

outfile << n;

outfile.flush();

}

cout << "Done";

outfile.close();

return 0;

1. }

a) Done  
b) Error  
c) Runtime error  
d) DoneDoneDone

Answer: a

58. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

int main ()

{

int a = 100;

double b = 3.14;

cout << a;

cout << endl;

cout << b << endl << a \* b;

endl (cout);

return 0;

}

a) 100  
b) 3.14  
c) 314  
d) All of the mentioned

Answer: d

59. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

int main ()

{

string str;

string str2="Steve jobs";

string str3="He founded apple";

str.append(str2);

str.append(str3, 6, 3);

str.append(str3.begin() + 6, str3.end());

str.append(5,0x2e);

cout << str << '**\n**';

return 0;

}

a) Steve jobs  
b) He founded apple  
c) Steve  
d) Steve jobsndended apple…..

Answer: d

60. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

int main ()

{

string name ("Jobs");

string family ("Steve");

name += " Apple ";

name += family;

name += '**\n**';

cout << name;

return 0;

}

a) Steve Jobs  
b) Apple  
c) Jobs Apple Steve  
d) Apple Steve

Answer: c

61. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

int main ()

{

string str ("Steve jobs");

cout << str.length();

return 0;

}

a) 8  
b) 10  
c) 12  
d) 9

Answer: b

62. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class Car

{

public:

int speed;

};

int main()

{

int Car :: \*pSpeed = &Car :: speed;

Car c1;

c1.speed = 1;

cout << c1.speed << endl;

c1.\*pSpeed = 2;

cout << c1.speed << endl;

return 0;

1. }

a) 1  
b) 2  
c) Both 1 & 2  
d) 4

Answer: c

63. What will be the output of the following C++ code?

#include <iostream>

#include <functional>

#include <algorithm>

using namespace std;

int main ()

{

int first[] = {10, 40, 90};

int second[] = {1, 2, 3};

int results[5];

transform ( first, first + 5, second, results, divides<int>());

for (int i = 0; i < 3; i++)

cout << results[i] << " ";

return 0;

1. }

a) 10 20  
b) 20 30  
c) 10 20 30  
d) 20 40

Answer: c

64. What will be the output of the following C++ code?

#include <iostream>

#include <functional>

#include <algorithm>

using namespace std;

int main ()

{

int numbers[] = {3, -4, -5};

transform ( numbers, numbers + 3, numbers, negate<int>() );

for (int i = 0; i < 3; i++)

cout << numbers[i] << " ";

}

a) -3  
b) 3 4 5  
c) 3 -4 5  
d) -3 4 5

Answer: d

65. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

class A

{

public:

A(int n )

{

cout << n;

}

};

class B: public A

{

public:

B(int n, double d)

: A(n)

{

cout << d;

}

};

class C: public B

{

public:

C(int n, double d, char ch)

: B(n, d)

{

cout <<ch;

}

};

int main()

{

C c(5, 4.3, 'R');

return 0;

}

a) 54.3R  
b) R4.35  
c) 4.3R5  
d) R2.6

Answer: a

67. What will be the output of the following C++ code?

#include<iostream>

using namespace std;

class X

{

int m;

public:

X() : m(10)

{

}

X(int mm): m(mm)

{

}

int getm()

{

return m;

}

};

class Y : public X

{

int n;

public:

Y(int nn) : n(nn) {}

int getn() { return n; }

};

int main()

{

Y yobj( 100 );

cout << yobj.getm() << " " << yobj.getn() << endl;

1. }

a) 10 100  
b) 100 10  
c) 10 10  
d) 100 100

Answer: a

68.  What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class Box

{

int capacity;

public:

Box(int cap){

capacity = cap;

}

friend void show();

};

void show()

{

Box b(10);

cout<<"Value of capacity is: "<<b.capacity<<endl;

}

int main(int argc, char const \*argv[])

{

show();

return 0;

}

a) Value of capacity is: 10  
b) Value of capacity is: 100  
c) Error  
d) Segmentation fault

Answer: a

69.  How many member functions are there in this C++ class excluding constructors and destructors?

class Box

{

int capacity;

public:

void print();

friend void show();

bool compare();

friend bool lost();

};

a) 1  
b) 2  
c) 3  
d) 4

Answer: b

70. . What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class Box

{

int capacity;

Box(){}

Box(double capacity){

this->capacity = capacity;

}

};

int main(int argc, char const \*argv[])

{

Box b1(10);

Box b2 = Box(14);

return 0;

}

a) Error  
b) Segmentation fault  
c) 4  
d) No output  
View Answer

Answer: a

71. #include <iostream>

using namespace std;

int main()

{

typedef int num;

num a = 10, b = 15;

num c = a + b + a - b;

cout << c;

return 0;

1. }

a) 20  
b) 15  
c) 30  
d) 25

Answer: a

72. How many times CppBuzz.com is printed?

#include<iostream>

int main()

{

int i=0;

lbl:

std::cout<<"CppBuzz.com";

i++;

if(i<5)

{

goto lbl;

}

return 0;

}

1. Error  
   (B) 5 times  
   (C) 4 times  
   (D) 6 times

Ans: B

73. What is output of below program?

#include<iostream>

int main()

{

const int a=10;

a++;

std::cout<<a;

return 0;

}

1. 10  
   (B) 11  
   (C) Compilation Error  
   (D) Linking Error

Ans: C

74. /What is the value of a in below program?

int main()

{

int a, b=20;

a = 90/b;

return 0;

}

Ans: C

75. #include<iostream>

class base

{

public:

base()

{

cout<<"BCon";

}

~base()

{

cout<<"BDest ";

}

};

class derived: public base

{

public:

derived()

{ cout<<"DCon ";

}

~derived()

{ cout<<"DDest ";

}

};

int main()

{

derived object;

return 0;

}

1. Dcon DDest  
   (B) Dcon DDest BCon BDest  
   (C) BCon DCon DDest BDest  
   (D) BCon DCon BDes DDest

Ans: C

76. What is the output of below program?

int main()

{

int a = 10;

cout<<a++;

return 0;

}

(A) 10  
(B) 11  
(C) 12  
(D) Not defined

Ans: A

76. What should be the output of below program?

#include<iostream>

int main()

{

std::cout<<"CppBuzz";;;;;

return 0;

}

1. Compilation Error  
   (B) Runtime Error  
   (C) CppBuzz  
   (D) CppBuzz;;;;

Ans: C

78. Find the output of below program:-

int main()

{

int i = 0, x = 0;

do

{

if(i % 5 == 0)

{

std::cout<<x;

x++;

}

++i;

}while(i<10);

cout<<x;

return 0;

}

A) 01  
(B) 012  
(C) 0  
(D) 0123

Ans: B

79. How many times CppBuzz.com is printed here?

int main()

{

for(int i=0; i< 5; i++);

cout<<"CppBuzz.com";

return 0;

}

A) 0  
(B) 1  
(C) 4  
(D) 5

Ans: B

79. #include<iostream>

enum color{

black=-5,

blue,

red

};

int main()

{

color obj = blue;

std::cout<<obj;

return 0;

}

(A) Compilation Error  
(B) 0  
(C) 1  
(D) -4

Ans: D

80.

#include<iostream>

using namespace std;

int main()

{

int x = 9;

while (x>0)

x--;

cout<<x;

return 0;

}

(A) 9876543210  
(B) 987654321  
(C) 9  
(D) 0

Ans: D

**C++ Objective Questions & Answers**

1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an instance of class.

a. code.

b. object.

c. variable.

d. pointer.

ANSWER: B

2. One of the methods to stop the execution of the function is by calling the standard \_\_\_\_\_\_\_\_

function.

a. goto.

b. jump.

c. stop.

d. exit.

ANSWER: D

3. A \_\_\_\_\_\_\_\_ function is a function that has no body inside its base class.

a. inline.

b. friend.

c. constructor.

d. pure virtual.

ANSWER: D

4. In a group of nested loops, which loop is executed the most number of times?

a. The outermost loop.

b. The innermost loop.

c. All loops are executed the same number of times.

d. Cannot be determined without knowing the size of the loops bottom of form.

ANSWER: B

5. A \_\_\_\_\_\_\_\_ converts from an object of the type of the constructor's parameter to an object of

the class.

a. conversion function.

b. member function.

c. class conversion.

d. conversion constructors.

ANSWER: D

6. Array indexing always starts with the \_\_\_\_\_\_ number.

a. 0

b. 1

c. 2

d. \0

ANSWER: A

7. Set precision requires the header file \_\_\_\_\_

a. stdlib.h.

b. iomanip.h.

c. console.h.

d. conio.h.

ANSWER: B

8. A structure defines a \_\_\_\_\_\_\_\_type.

a. class.

b. pointers.

c. arrays.

d. variables.

ANSWER: A

9. The \_\_\_\_\_\_\_\_ operator is used to return the value of the variable to which the pointer points.

a. reference.

b. dereference.

c. dot.

d. arrow.

ANSWER: B

10. main() is a\_\_\_\_\_\_ function.

a. built in.

b. user defined.

c. constant.

d. derived.

ANSWER: B

11. OOP language supports object based features, inheritance and \_\_\_\_\_\_\_\_\_\_\_\_\_\_

* [A] Encapsulation.
* [B} Polymorphism
* [C} Object identity.
* [A] Functions.

**Answer:** Option [B]

12. \_\_\_\_\_\_\_\_\_\_\_ is one of the ways to achieve polymorphism.

* [A] Inheritance
* [B} Data overloading
* [C} Operator overloading.
* [A] Message binding.

**Answer:** Option [C]

13. Which of the following is not an arithmetic operator?

* [A] +
* [B} \*
* [C} -
* [A] &

**Answer:** Option [D]

14. Which of the following is a correct comment?

* [A] \*/ Comments \*/.
* [B} \*\* Comment \*\*.
* [C} /\* Comment \*/.
* [A] { Comment }.

**Answer:** Option [C]

15. When following piece of code is executed, what happens? b = 3; a = b++;

* [A] a contains 3 and b contains 4.
* [B} a contains 4 and b contains 4.
* [C} a contains 4 and b contains 3.
* [A] a contains 3 and b contains 3.

**Answer:** Option [A]

16. The parameters specified in the function call are known as \_\_\_\_\_\_\_\_\_\_\_\_ parameters

* [A] formal
* [B} actual
* [C} value
* [A] original

**Answer:** Option [B]

17. Which of the following will not return a value?

* [A] null
* [B} void
* [C} empty
* [A] free

**Answer:** Option [B]

18. Function overloading is also similar to which of the following

* [A] operator overloading
* [B} constructor overloading
* [C} destructor overloading
* [A] none of the mentioned

**Answer:** Option [B]

19. \_\_\_\_\_\_\_ function has access to all private and protected members of the class for which it is a friend

* [A] Friend
* [B} Member
* [C} Nonmember
* [A] Void

**Answer:** Option [A]

20. Which is not a loop structure?

* [A] for
* [B} do while.
* [C} while
* [A] repeat until.

**Answer:** Option [D]

21. Which one of the following is a built in function?

* [A] stringlen()
* [B} strlength().
* [C} strlen().
* [A] strleng().

**Answer:** Option [C]

22. \_\_\_\_\_\_\_\_ is the process of using the same name for two or more functions

* [A] Function overloading.
* [B} Operator overloading.
* [C} Default function.
* [A] Default function. Constructors.

**Answer:** Option [A]

23. \_\_\_\_\_\_\_\_\_\_\_ is used to write a single character to output file.

* [A] cin().
* [B} put().
* [C} get().
* [A] getw().

**Answer:** Option [B]

24. he technique of building new classes from existing classes is called \_\_\_\_\_\_\_.

* [A] inheritance
* [B} overloading
* [C} constructor
* [A] polymorphism

**Answer:** Option [A]

**Polymorphism**

This set of Object Oriented Programming (OOPs) using C++ Multiple Choice Questions & Answers (MCQs) focuses on “Polymorphism”.

1. Which among the following best describes polymorphism?  
a) It is the ability for a message/data to be processed in more than one form  
b) It is the ability for a message/data to be processed in only 1 form  
c) It is the ability for many messages/data to be processed in one way  
d) It is the ability for undefined message/data to be processed in at least one way

Answer: a  
Explanation: It is actually the ability for a message / data to be processed in more than one form. The word polymorphism indicates many-forms. So if a single entity takes more than one form, it is known as polymorphism.

2. What do you call the languages that support classes but not polymorphism?  
a) Class based language  
b) Procedure Oriented language  
c) Object-based language  
d) If classes are supported, polymorphism will always be supported

Answer: c  
Explanation: The languages which support classes but doesn’t support polymorphism, are known as object-based languages. Polymorphism is such an important feature, that is a language doesn’t support this feature, it can’t be called as a OOP language.

3. Which among the following is the language which supports classes but not polymorphism?  
a) SmallTalk  
b) Java  
c) C++  
d) Ada

Answer: d  
Explanation: Ada is the language which supports the concept of classes but doesn’t support the polymorphism feature. It is an object-based programming language. Note that it’s not an OOP language.

4. If same message is passed to objects of several different classes and all of those can respond in a different way, what is this feature called?  
a) Inheritance  
b) Overloading  
c) Polymorphism  
d) Overriding

Answer: c  
Explanation: The feature defined in question defines polymorphism features. Here the different objects are capable of responding to the same message in different ways, hence polymorphism.

5. Which class/set of classes can illustrate polymorphism in the following code

abstract class student

{

public : int marks;

calc\_grade();

}

class topper:public student

{

public : calc\_grade()

{

return 10;

}

};

class average:public student

{

public : calc\_grade()

{

return 20;

}

};

class failed{ int marks; };

a) Only class student can show polymorphism  
b) Only class student and topper together can show polymorphism  
c) All class student, topper and average together can show polymorphism  
d) Class failed should also inherit class student for this code to work for polymorphism

Answer: c  
Explanation: Since Student class is abstract class and class topper and average are inheriting student, class topper and average must define the function named calc\_grade(); in abstract class. Since both the definition are different in those classes, calc\_grade() will work in different way for same input from different objects. Hence it shows polymorphism.

6. Which type of function among the following shows polymorphism?  
a) Inline function  
b) Virtual function  
c) Undefined functions  
d) Class member functions

Answer: b  
Explanation: Only virtual functions among these can show polymorphism. Class member functions can show polymorphism too but we should be sure that the same function is being overloaded or is a function of abstract class or something like this, since we are not sure about all these, we can’t say whether it can show polymorphism or not.

7. In case of using abstract class or function overloading, which function is supposed to be called first?  
a) Local function  
b) Function with highest priority in compiler  
c) Global function  
d) Function with lowest priority because it might have been halted since long time, because of low priority

Answer: b  
Explanation: Function with highest priority is called. Here, it’s not about the thread scheduling in CPU, but it focuses on whether the function in local scope is present or not, or if scope resolution is used in some way, or if the function matches the argument signature. So all these things define which function has the highest priority to be called in runtime. Local function could be one of the answer but we can’t say if someone have used pointer to another function or same function name.

8. Which among the following can’t be used for polymorphism?  
a) Static member functions  
b) Member functions overloading  
c) Predefined operator overloading  
d) Constructor overloading

Answer: a  
Explanation: Static member functions are not property of any object. Hence it can’t be considered for overloading/overriding. For polymorphism, function must be property of object, not only of class.

9. What is output of the following program?

Answer: b  
Explanation: Only virtual functions among these can show polymorphism. Class member functions can show polymorphism too but we should be sure that the same function is being overloaded or is a function of abstract class or something like this, since we are not sure about all these, we can’t say whether it can show polymorphism or not.

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Answer: b  
Explanation: Function with highest priority is called. Here, it’s not about the thread scheduling in CPU, but it focuses on whether the function in local scope is present or not, or if scope resolution is used in some way, or if the function matches the argument signature. So all these things define which function has the highest priority to be called in runtime. Local function could be one of the answer but we can’t say if someone have used pointer to another function or same function name.

8. Which among the following can’t be used for polymorphism?  
a) Static member functions  
b) Member functions overloading  
c) Predefined operator overloading  
d) Constructor overloading

Answer: a  
Explanation: Static member functions are not property of any object. Hence it can’t be considered for overloading/overriding. For polymorphism, function must be property of object, not only of class.

9. What is output of the following program?

class student

{

public : int marks;

void disp()

{

cout<<”its base class”

};

class topper:public student

{

public :

void disp()

{

cout<<”Its derived class”;

}

}

void main() { student s; topper t;

s.disp();

t.disp();

}

a) Its base classIts derived class  
b) Its base class Its derived class  
c) Its derived classIts base class  
d) Its derived class Its base class

Answer: a  
Explanation: You need to focus on how the output is going to be shown, no space will be given after first message from base class. And then the message from derived class will be printed. Function disp() in base class overrides the function of base class being derived.

10. Which among the following can show polymorphism?  
a) Overloading ||  
b) Overloading +=  
c) Overloading <<  
d) Overloading &&

Answer: c  
Explanation: Only insertion operator can be overloaded among all the given options. And the polymorphism can be illustrated here only if any of these is applicable of being overloaded. Overloading is type of polymorphism.

11. Find the output of the following program.

class education

{

char name[10];

public : disp()

{

cout<<”Its education system”;

}

class school:public education

{

public: void dsip()

{

cout<<”Its school education system”;

}

};

void main()

{

school s;

s.disp();

}

}

a) Its school education system  
b) Its education system  
c) Its school education systemIts education system  
d) Its education systemIts school education system

Answer: a  
Explanation: Notice that the function name in derived class is different from the function name in base class. Hence when we call the disp() function, base class function is executed. No polymorphism is used here.

12. Polymorphism is possible in C language.  
a) True  
b) False

Answer: a  
Explanation: It is possible to implement polymorphism in C language, even though it doesn’t support class. We can use structures and then declare pointers which in turn points to some function. In this way we simulate the functions like member functions but not exactly member function. Now we can overload these functions, hence implementing polymorphism in C language.

13. Which problem may arise if we use abstract class functions for polymorphism?  
a) All classes are converted as abstract class  
b) Derived class must be of abstract type  
c) All the derived classes must implement the undefined functions  
d) Derived classes can’t redefine the function

Answer: c  
Explanation: The undefined functions must be defined is a problem, because one may need to implement few undefined functions from abstract class, but he will have to define each of the functions declared in abstract class. Being useless task, it is a problem sometimes.

14. Which among the following is not true for polymorphism?  
a) It is feature of OOP  
b) Ease in readability of program  
c) Helps in redefining the same functionality  
d) Increases overhead of function definition always

Answer: d  
Explanation: It never increases function definition overhead, one way or another if you don’t use polymorphism, you will use the definition in some other way, so it actually helps to write efficient codes.

15. If 2 classes derive one base class and redefine a function of base class, also overload some operators inside class body. Among these two things of function and operator overloading, where is polymorphism used?  
a) Function overloading only  
b) Operator overloading only  
c) Both of these are using polymorphism  
d) Either function overloading or operator overloading because polymorphism can be applied only once in a program

Answer: c  
Explanation: Both of them are using polymorphism. It is not necessary that polymorphism can be used only once in a program, it can be used anywhere, any number of times in a single program.

Inheritance

1. What is Inheritance in C++?  
a) Wrapping of data into a single class  
b) Deriving new classes from existing classes  
c) Overloading of classes  
d) Classes with same names

Answer: b  
Explanation: Inheritance is the concept of OOPs in which new classes are derived from existing classes in order to reuse the properties of classes defined earlier.

2. How many specifiers are used to derive a class?  
a) 1  
b) 2  
c) 3  
d) 4

Answer: c  
Explanation: There are 3 specifiers used to derive a class. They are private, protected and public.

3. Which specifier makes all the data members and functions of base class inaccessible by the derived class?  
a) private  
b) protected  
c) public  
d) both private and protected

Answer: a  
Explanation: Private access specifier is used to make all the data members and functions of the base class inaccessible.

4. If a class is derived privately from a base class then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
a) no members of the base class is inherited  
b) all members are accessible by the derived class  
c) all the members are inherited by the class but are hidden and cannot be accessible  
d) no derivation of the class gives an error

Answer: c  
Explanation: Whenever a class is derived, all the members of the base class is inherited by the derived class but are not accessible by the derived class.

5. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class A

{

int a, b;

float d;

public:

void change(int i){

a = i;

}

void value\_of\_a(){

cout<<a;

}

};

class B: private A

{

};

int main(int argc, char const \*argv[])

{

B b;

cout<<sizeof(B);

return 0;

}

a) 8  
b) 12  
c) Error  
d) Segmentation fault

Answer: b  
Explanation: As class B is derived from class A and class A has three members with each of 4 bytes size hence size of B equal to 3 \* 4 = 12 bytes.

6. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class A

{

float d;

public:

int a;

void change(int i){

a = i;

}

void value\_of\_a(){

cout<<a;

}

};

class B: public A

{

int a = 15;

public:

void print(){

cout<<a;

}

};

int main(int argc, char const \*argv[])

{

B b;

b.change(10);

b.print();

b.value\_of\_a();

return 0;

}

1. 1010  
   b) 1510  
   c) 1515  
   d) 5110

Answer: b  
Explanation: When change() is called it sets parents class ‘a’ variable = 10. When print() is called then ‘a’ from class B is printed and wehn value\_of\_a() is called then ‘a’ from class A is printed.

7. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class A

{

float d;

public:

A(){

cout<<"Constructor of class A**\n**";

}

};

class B: public A

{

int a = 15;

public:

B(){

cout<<"Constructor of class B**\n**";

}

};

int main(int argc, char const \*argv[])

{

B b;

return 0;

}

a)

Constructor of class A

Constructor of class B

b) Constructor of class A  
c) Constructor of class B  
d)

Constructor of class B

Constructor of class A

Answer: a  
Explanation: When a derived class is declared it calls both its constructor and the base class constructor. It first calls the base class constructor and then its own constructor.

8. What is a virtual function in C++?  
a) Any member function of a class  
b) All functions that are derived from the base class  
c) All the members that are accessing base class data members  
d) All the functions which are declared in the base class and is re-defined/overridden by the derived class  
View Answer

Answer: d  
Explanation: Virtual function is a function that is declared inside the base class and is re-defined inside the derived class.

9. Which is the correct syntax of declaring a virtual function?  
a) virtual int func();  
b) virtual int func(){};  
c) inline virtual func();  
d) inline virtual func(){};  
View Answer

Answer: a  
Explanation: To make a function virtual function we just need to add virtual keyword at the starting of the function declaration.

10. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class A{

float d;

public:

virtual void func(){

cout<<"Hello this is class A**\n**";

}

};

class B: public A{

int a = 15;

public:

void func(){

cout<<"Hello this is class B**\n**";

}

};

int main(int argc, char const \*argv[])

{

B b;

b.func();

return 0;

}

a) Hello this is class B  
b) Hello this is class A  
c) Error  
d) Segmentation fault  
View Answer

Answer: a  
Explanation: Normal execution of the program and object calls func() from class B.

11. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class A

{

float d;

public:

virtual void func(){

cout<<"Hello this is class A**\n**";

}

};

class B: public A

{

int a = 15;

public:

void func(){

cout<<"Hello this is class B**\n**";

}

};

int main(int argc, char const \*argv[])

{

A \*a;

a->func();

return 0;

}

a) Hello this is class A  
b) Hello this is class B  
c) Error  
d) Segmentation Fault  
View Answer

Answer: d  
Explanation: As object ‘a’ is a pointer object and we know every pointer needs to be initialised memory before use. Hence segmentation fault. Use A \*a = new A(); to initialise memory to the object.

12. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

class A

{

float d;

public:

virtual void func(){

cout<<"Hello this is class A**\n**";

}

};

class B: public A

{

int a = 15;

public:

void func(){

cout<<"Hello this is class B**\n**";

}

};

int main(int argc, char const \*argv[])

{

A \*a = new A();

B b;

a = &b;

a->func();

return 0;

}

a) Hello this is class A  
b) Hello this is class B  
c) Error  
d) Segmentation Fault

Answer: b  
Explanation: As pointer object a is pointing to the object b hence the definition of virtual function defined inside the class B will be class. This is one of the use of virtual function.

13. Which statement is incorrect about virtual function.  
a) They are used to achieve runtime polymorphism  
b) They are used to hide objects  
c) Each virtual function declaration starts with the virtual keyword  
d) All of the mentioned

Answer: b  
Explanation: Virtual function are used to achieve runtime polymorphism by calling the right function during runtime. Their declaration starts with a virtual keyword.

14. The concept of deciding which function to invoke during runtime is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
a) late binding  
b) dynamic linkage  
c) static binding  
d) both late binding and dynamic linkage

Answer: d  
Explanation: The concept of deciding which function to invoke during runtime is called late binding or dynamic linkage. Late binding because function binding to the object is done during runtime. Dynamic linkage because this binding is done during runtime.

15. What is a pure virtual function?  
a) A virtual function defined inside the base class  
b) A virtual function that has no definition relative to the base class  
c) A virtual function that is defined inside the derived class  
d) Any function that is made virtual

Answer: b  
Explanation: A virtual function that has no definition relative to the base class is called a pure virtual function.

Files

|  |  |  |
| --- | --- | --- |
| **1)    By default, all the files are opened in \_\_\_\_\_\_\_\_\_\_\_mode .** *- Published on 19 Oct 15*  **a.** Binary  **b.** Text  **c.** Can’t say   |  | | --- | | [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/by-default-all-files-are-opened-in-text-mode-file-handling-1352.aspx) | |  | |
| **2)   It is not possible to combine two or more file opening mode in open () method.** *- Published on 19 Oct 15*  **a.** True  **b.** False   |  | | --- | | [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/not-possible-combine-two-or-more-file-opening-mode-in-open-method-file-handling-1348.aspx) | | **ANSWER: False**  **Explanation:** No explanation is available for this question! | |
| **3)   Which of the following is not a file opening mode \_\_\_\_ .** *- Published on 19 Jul 15*  **a.** ios::ate  **b.** ios::nocreate  **c.** ios::noreplace  **d.** ios::truncate   |  | | --- | | [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/iostruncate-is-not-a-file-opening-mode-file-handling-1330.aspx) | | **ANSWER: ios::truncate**  **Explanation:** No explanation is available for this question! | |
| **4)   Due to ios::trunc mode, the file is truncated to zero length.** *- Published on 17 Jul 15*  **a.** True  **b.** False   |  | | --- | | [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/due-to-iostrunc-mode-the-file-is-truncated-to-zero-length-file-handling-1236.aspx) | | **ANSWER: True**  **Explanation:** No explanation is available for this question! | |
| **5)   If we have object from ofstream class, then default mode of opening the file is \_\_\_\_\_ .** *- Published on 17 Jul 15*  **a.** ios::in  **b.** ios::out  **c.** ios::in|ios::trunc  **d.** ios::out|ios::trunk   |  | | --- | | [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/default-mode-of-opening-file-is-iosoutiostrunk-file-handling-1223.aspx) | | **ANSWER: ios::out|ios::trunk**  **Explanation:** No explanation is available for this question! | |
| **6)   \_\_\_\_\_\_\_\_\_\_ is return type of is\_open() function.** *- Published on 17 Jul 15*  **a.** int  **b.** bool  **c.** float  **d.** char \*   |  | | --- | | [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/bool-is-return-type-of-isopen-function-file-handling-1219.aspx) | |  | |
| **7)   If we have object from fstream class, then what is the default mode of opening the file?** *- Published on 17 Jul 15*  **a.** ios::in|ios::out  **b.** ios::in|ios::out|ios::trunc  **c.** ios::in|ios::trunc  **d.** Default mode depends on compiler   |  | | --- | | [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/default-mode-depends-on-compiler-for-opening-file-file-handling-1218.aspx) | | **ANSWER: Default mode depends on compiler**  **Explanation:** No explanation is available for this question! | |
| **8)   To create an output stream, we must declare the stream to be of class \_\_\_\_\_\_\_\_\_\_\_ .** *- Published on 17 Jul 15*  **a.** ofstream  **b.** ifstream  **c.** iostream  **d.** None of these   |  | | --- | | [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/create-an-output-stream-declare-stream-to-be-of-class-ofstream-file-handling-1209.aspx) | | **ANSWER: ofstream**  **Explanation:** No explanation is available for this question! | |
| **9)   Streams that will be performing both input and output operations must be declared as class \_\_\_\_\_\_\_\_\_ .** *- Published on 17 Jul 15*  **a.** iostream  **b.** fstream  **c.** stdstream  **d.** Stdiostream   |  | | --- | | [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/streams-that-will-perform-both-input-output-operations-class-fstream-file-handling-1200.aspx) | | **ANSWER: fstream**  **Explanation:** No explanation is available for this question! | |
| **10)   To perform File I/O operations, we must use \_\_\_\_\_\_\_\_\_\_\_\_\_ header file.** *- Published on 17 Jul 15*  **a.** < ifstream>  **b.** < ofstream>  **c.** < fstream>  **d.** Any of these   |  | | --- | | [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/header-file-to-perform-file-io-operations-file-handling-1184.aspx) | | **ANSWER: < fstream>**  **Explanation:** No explanation is available for this question! | |

**11)   Which of the following is not used to seek a file pointer?**  
*- Published on 17 Jul 15*

**a.** ios::cur

**b.** ios::set

**c.** ios::end

**d.** ios::beg

|  |
| --- |
| [Answer](javascript:%20void%200;)  [Explanation](https://www.careerride.com/mchoice/iosset-is-not-used-to-seek-file-pointer-file-handling-1169.aspx) |
| **ANSWER: ios::set**  **Explanation:** No explanation is available for this question! |