

NETB151 Object-Oriented Programming (C++)

Test No. 3749

-
1. Mark the correct/incorrect assertions about pointers.
- a) When passing an array to a function, only the starting address is passed.
 - b) Pointer arithmetic means to add an integer offset to an array pointer.
 - c) If p and q are pointers to integers, then $p + q$ is a correct expression.
 - d) The value of a pointer must be an address in the heap memory.

-
2. Mark the correct/incorrect definitions and initializations of character pointers and arrays.
- a) `char* heap = new char;`
 - b) `char one[1] = "1";`
 - c) `char hello[] = "Hello";`
 - d) `char bye[7] = "bye-bye";`

-
3. We have the following variable definitions:
`int a[3] = {1, 2, 3};`
`int* pa = a;`
 Mark with "yes" expressions which have value 3.
- a) `(*pa) + a[1]`
 - b) `pa[1] + a[1]`
 - c) `*(pa + 2)`
 - d) `(*pa) * 3`

-
4. We have the following classes:

```
class Point {
... };
class Circle : public Point {
... };
```

Mark the correct/incorrect assertions about the classes `Point` and `Circle`.

- a) The member functions of the class `Circle` have access to any public member function of the class `Point`.
- b) The class `Point` is the base class and the class `Circle` is the derived class.
- c) The data members of the class `Circle` are present in each object of the class `Point`.
- d) The member functions of the class `Circle` have access to any data member of the class `Point`.

-
5. We have the following variable definitions:

```
int p = 2;
int* ptr1;
int* ptr2 = new int(1);
```

Mark the correct/incorrect assignment statements.

- a) `ptr1 = p;`
- b) `*ptr1 = ptr2;`
- c) `*ptr1 = 20;`
- d) `p = *ptr2;`

NETB151 Object-Oriented Programming (C++)

Test No. 3756

1. Mark the correct/incorrect assertions about inheritance hierarchy of stream classes.

- a) The `ostream` class derives from `ostream`.
- b) The `iostream` class derives from `ifstream` and `ofstream`.
- c) The `fstream` class derives from `ifstream`.
- d) The `ifstream` class derives from `istream`.

2. We have the following variable definitions:

```
int p = 2;
int* ptr1;
int* ptr2 = new int(1);
```

Mark the correct/incorrect assignment statements.

- a) `ptr1 = 20;`
- b) `p = *ptr2;`
- c) `p = ptr2;`
- d) `ptr1 = *ptr2;`

3. We have the following classes:

```
class Point {
... };
class Circle : public Point {
... };
```

Mark the correct/incorrect assertions about the classes `Point` and `Circle`.

a) The class `Circle` is the base class and the class `Point` is the derived class.

b) The member functions of the class `Circle` have access to any public member function of the class `Point`.

c) The data members of the class `Point` are present in each object of the class `Circle`.

d) The data members of the class `Circle` are present in each object of the class `Point`.

4. Mark the correct/incorrect assertions about stream classes, objects and member functions.

a) The `getline` member-function is defined for `istream` objects.

b) The object `cin` belongs to a class that is derived from `ifstream`.

c) The `<<` operator is defined for `ostream` objects.

d) The `close` member-function is defined for `fstream` objects.

5. Suppose the class `D` inherits from `B`. Let `b` be an object of the class `B`, `d` be an object of the class `D`, `pb` be a pointer of the class `B` and `pd` be a pointer of the class `D`. Which of the following assignments are legal?

a) `d = b;`

b) `d = *pd;`

c) `*pd = *pb;`

d) `pb = pd;`

NETB151 Object-Oriented Programming (C++)

Test No. 3763

1. Mark the correct/incorrect assertions about inheritance hierarchy of stream classes.

- a) The `fstream` class derives from `ofstream`.
- b) The `iostream` class derives from `ifstream` and `ofstream`.
- c) The `iostream` class derives from `istream` and `ostream`.
- d) The `fstream` class derives from `ifstream` and `ofstream`.

2. Mark the correct/incorrect definitions and initializations of character pointers and arrays.

- a) `char* oops = {0};`
- b) `char* heap = new char;`
- c) `char hey[] = 1;`
- d) `char hello[] = "Hello";`

3. Mark the correct/incorrect assertions about stream classes, objects and member functions.

- a) The object `cout` belongs to the class `iostream`.
 - b) The object `cin` belongs to a class that is derived from `istream`.
 - c) An object of `ostream` class is a destination for bytes.
 - d) The `open` member-function is defined for `istream` objects.
-

4. We have the following classes:

```
class Point {
... };
class Circle : public Point {
... };
```

Mark the correct/incorrect assertions about the classes `Point` and `Circle`.

- a) The data members of the class `Point` are present in each object of the class `Circle`.
 - b) The class `Circle` is the base class and the class `Point` is the derived class.
 - c) The data members of the class `Circle` are present in each object of the class `Point`.
 - d) The member functions of the class `Circle` have access to any data member of the class `Point`.
-

5. We have the following variable definitions:

```
int a[3] = {1, 2, 3};
int* pa = a;
```

Mark with "yes" expressions which have value 3.

- a) `*pa + *a`
- b) `*(pa + 2)`
- c) `pa[1] + a[1]`
- d) `a[0] + pa[1]`

NETB151 Object-Oriented Programming (C++)

Test No. 3770

1. We have the following classes:

```
class Point {  
... };  
class Circle : public Point {  
... };
```

Mark the correct/incorrect assertions about the classes `Point` and `Circle`.

- a) The member functions of the class `Circle` have access to any data member of the class `Point`.
- b) The member functions of the class `Point` have access to any data member of the class `Circle`.
- c) The class `Circle` is the base class and the class `Point` is the derived class.
- d) The member functions of the class `Circle` have access to any public member function of the class `Point`.

2. Mark the correct/incorrect definitions and initializations of character pointers and arrays.

- a) `char* heap = new char;`
- b) `char just[5] = "just";`
- c) `char bye[7] = "bye-bye";`
- d) `char* p = "pointer";`

3. Suppose the class `D` inherits from `B`. Let `b` be an object of the class `B`, `d` be an object of the class `D`, `pb` be a pointer

of the class `B` and `pd` be a pointer of the class `D`. Which of the following assignments are legal?

- a) `*pd = *pb;`
- b) `pb = pd;`
- c) `d = *pd;`
- d) `*pb = d;`

4. We have the following variable definitions:

```
int a[3] = {1, 2, 3};  
int* pa = a;
```

Mark with "yes" expressions which have value 3.

- a) `a[0] + pa[1]`
- b) `(*pa) * 3`
- c) `a[0] + a[1]`
- d) `(*pa) + a[1]`

5. We have the following variable definitions:

```
int p = 2;  
int* ptr1;  
int* ptr2 = new int(1);
```

Mark the correct/incorrect assignment statements.

- a) `*p = 20;`
- b) `*ptr1 = NULL;`
- c) `ptr1 = NULL;`
- d) `*p = NULL;`

NETB151 Object-Oriented Programming (C++)

Test No. 3777

1. We have the following variable definitions:

```
int a[3] = {1, 2, 3};
```

```
int* pa = a;
```

Mark with "yes" expressions which have value 3.

- a) `pa[1] + a[1]`
- b) `(*pa) * 3`
- c) `*(pa + 2)`
- d) `*pa + *a`

2. We have the following classes:

```
class Point {
```

```
... };
```

```
class Circle : public Point {
```

```
... };
```

Mark the correct/incorrect assertions about the classes `Point` and `Circle`.

- a) The class `Circle` is the base class and the class `Point` is the derived class.
- b) The member functions of the class `Point` have access to any data member of the class `Circle`.
- c) The member functions of the class `Circle` have access to any data member of the class `Point`.
- d) The class `Point` is the base class and the class `Circle` is the derived class.

3. We have the following variable definitions:

```
int p = 2;
```

```
int* ptr1;
```

```
int* ptr2 = new int(1);
```

Mark the correct/incorrect assignment statements.

- a) `ptr1 = p;`
- b) `*p = NULL;`
- c) `ptr1 = *p;`
- d) `ptr1 = NULL;`

4. Mark the correct/incorrect definitions and initializations of character pointers and arrays.

- a) `char just[5] = "just";`
- b) `char bye[7] = "bye-bye";`
- c) `char* p = "pointer";`
- d) `char* heap = new char;`

5. Mark the correct/incorrect assertions about inheritance hierarchy of stream classes.

- a) The `fstream` class derives from `iostream`.
- b) The `ifstream` class derives from `istream`.
- c) The `iostream` class derives from `istream` and `ostream`.
- d) The `fstream` class derives from `ifstream`.

NETB151 Object-Oriented Programming (C++)

Test No. 3784

1. Mark the correct/incorrect assertions about stream classes, objects and member functions.

- a) The `close` member-function is defined for `fstream` objects.
- b) The object `cout` belongs to the class `iostream`.
- c) An object of `istream` class is a source of bytes.
- d) The object `cout` belongs to a class that is derived from `ostream`.

2. We have the following variable definitions:

```
int p = 2;
int* ptr1;
int* ptr2 = new int(1);
```

Mark the correct/incorrect assignment statements.

- a) `p = ptr2;`
- b) `*ptr1 = ptr2;`
- c) `*ptr1 = *p;`
- d) `*p = NULL;`

3. Mark the correct/incorrect assertions about inheritance hierarchy of stream classes.

- a) The `istringstream` class derives from `istream`.
- b) The `fstream` class derives from `iostream`.
- c) The `ifstream` class derives from `istream`.
- d) The `fstream` class derives from `ifstream` and `ofstream`.

4. Mark the correct/incorrect assertions about pointers.

- a) When passing an array to a function, only the starting address is passed.
- b) Pointer arithmetic means to add an integer offset to an array pointer.
- c) A pointer denotes the location of a value in the memory.
- d) The value of a pointer must be an address in the heap memory.

5. Suppose the class `D` inherits from `B`. Let `b` be an object of the class `B`, `d` be an object of the class `D`, `pb` be a pointer of the class `B` and `pd` be a pointer of the class `D`. Which of the following assignments are legal?

- a) `b = *pd;`
- b) `pb = pd;`
- c) `d = *pd;`
- d) `*pb = b;`

NETB151 Object-Oriented Programming (C++)

Test No. 3791

1. We have the following variable definitions:

```
int p = 2;
int* ptr1;
int* ptr2 = new int(1);
```

Mark the correct/incorrect assignment statements.

- a) `ptr1 = p;`
- b) `*p = *ptr2;`
- c) `ptr1 = ptr2;`
- d) `p = *ptr2;`

2. Mark the correct/incorrect assertions about inheritance hierarchy of stream classes.

- a) The `fstream` class derives from `ifstream`.
- b) The `ostream` class derives from `ofstream`.
- c) The `fstream` class derives from `iostream`.
- d) The `istream` class derives from `ifstream`.

3. We have the following classes:

```
class Point {
... };
class Circle : public Point {
... };
```

Mark the correct/incorrect assertions about the classes `Point` and `Circle`.

a) The class `Circle` is the base class and the class `Point` is the derived class.

b) The data members of the class `Point` are present in each object of the class `Circle`.

c) The member functions of the class `Circle` have access to any data member of the class `Point`.

d) The member functions of the class `Circle` have access to any public member function of the class `Point`.

4. Mark the correct/incorrect assertions about stream classes, objects and member functions.

a) The object `cin` belongs to a class that is derived from `istream`.

b) The object `cin` belongs to a class that is derived from `ifstream`.

c) The open member-function is defined for `istream` objects.

d) The object `cout` belongs to a class that is derived from `ostream`.

5. We have the following variable definitions:

```
int a[3] = {1, 2, 3};
int* pa = a;
```

Mark with "yes" expressions which have value 3.

a) `a[0] + a[1]`

b) `(*pa) * 3`

c) `pa[1] + a[1]`

d) `*(pa + 2)`

NETB151 Object-Oriented Programming (C++)

Test No. 3798

1. We have the following variable definitions:

```
int p = 2;
int* ptr1;
int* ptr2 = new int(1);
```

Mark the correct/incorrect assignment statements.

- a) `p = *ptr2;`
- b) `ptr1 = NULL;`
- c) `*p = ptr2;`
- d) `*p = 20;`

2. We have the following classes:

```
class Point {
... };
class Circle : public Point {
... };
```

Mark the correct/incorrect assertions about the classes `Point` and `Circle`.

- a) The member functions of the class `Circle` have access to any data member of the class `Point`.
- b) The class `Circle` is the base class and the class `Point` is the derived class.
- c) The class `Point` is the base class and the class `Circle` is the derived class.
- d) The data members of the class `Circle` are present in each object of the class `Point`.

3. Mark the correct/incorrect assertions about inheritance hierarchy of stream classes.

- a) The `fstream` class derives from `ifstream`.
- b) The `fstream` class derives from `ofstream`.
- c) The `istringstream` class derives from `istream`.
- d) The `ifstream` class derives from `istream`.

4. Mark the correct/incorrect assertions about pointers.

- a) When passing an array to a function, only the starting address is passed.
- b) Pointer arithmetic means to add an integer offset to an array pointer.
- c) The value of a pointer must be an address in the heap memory.
- d) A pointer denotes the location of a value in the memory.

5. We have the following variable definitions:

```
int a[3] = {1, 2, 3};
int* pa = a;
```

Mark with "yes" expressions which have value 3.

- a) `3>(*pa)`
- b) `pa[1] + a[1]`
- c) `a[0] + a[1]`
- d) `(*pa) * 3`

NETB151 Object-Oriented Programming (C++)

Test No. 3805

1. We have the following variable definitions:

```
int p = 2;
int* ptr1;
int* ptr2 = new int(1);
```

Mark the correct/incorrect assignment statements.

- a) *ptr1 = NULL;
- b) p = 20;
- c) *p = ptr2;
- d) ptr1 = *ptr2;

2. We have the following variable definitions:

```
int a[3] = {1, 2, 3};
int* pa = a;
```

Mark with "yes" expressions which have value 3.

- a) *pa + *a
- b) pa[0] + a[0]
- c) a[0] + a[1]
- d) *(pa + 2)

3. We have the following classes:

```
class Point {
... };
class Circle : public Point {
... };
```

Mark the correct/incorrect assertions about the classes `Point` and `Circle`.

- a) The class `Point` is the base class and the class `Circle` is the derived class.
- b) The member functions of the class `Circle` have access to any data member of the class `Point`.
- c) The member functions of the class `Circle` have access to any public member function of the class `Point`.
- d) The member functions of the class `Point` have access to any data member of the class `Circle`.

4. Mark the correct/incorrect assertions about pointers.

- a) Pointer arithmetic means to add an integer offset to an array pointer.
- b) A pointer denotes the location of a value in the memory.
- c) If `p` and `q` are pointers to integers, then `p + q` is a correct expression.
- d) The value of a pointer must be an address in the heap memory.

5. Mark the correct/incorrect assertions about stream classes, objects and member functions.

- a) The object `cin` belongs to a class that is derived from `istream`.
- b) The object `cin` belongs to a class that is derived from `ifstream`.
- c) The `<<` operator is defined for `ostream` objects.
- d) The `>>` operator is defined for `istream` objects.

NETB151 Object-Oriented Programming (C++)

Test No. 3812

1. Mark the correct/incorrect assertions about inheritance hierarchy of stream classes.

- a) The `istringstream` class derives from `istream`.
- b) The `ostringstream` class derives from `ostream`.
- c) The `fstream` class derives from `ifstream`.
- d) The `fstream` class derives from `iostream`.

2. We have the following classes:

```
class Point {  
... };  
class Circle : public Point {  
... };
```

Mark the correct/incorrect assertions about the classes `Point` and `Circle`.

- a) The member functions of the class `Circle` have access to any data member of the class `Point`.
- b) The data members of the class `Circle` are present in each object of the class `Point`.
- c) The data members of the class `Point` are present in each object of the class `Circle`.
- d) The member functions of the class `Circle` have access to any public member function of the class `Point`.

3. Mark the correct/incorrect assertions about stream classes, objects and member functions.

- a) The object `cout` belongs to a class that is derived from `ostream`.
- b) The `getline` member-function is defined for `istream` objects.
- c) The object `cout` belongs to the class `iostream`.
- d) The object `cin` belongs to the class `iostream`.

4. We have the following variable definitions:

```
int a[3] = {1, 2, 3};  
int* pa = a;
```

Mark with "yes" expressions which have value 3.

- a) `pa[1] + a[1]`
- b) `a[0] + a[1]`
- c) `*pa + *a`
- d) `3>(*pa)`

5. We have the following variable definitions:

```
int p = 2;  
int* ptr1;  
int* ptr2 = new int(1);
```

Mark the correct/incorrect assignment statements.

- a) `*ptr1 = *ptr2;`
- b) `*ptr1 = p;`
- c) `p = 20;`
- d) `*ptr1 = NULL;`

Test 1 – NETB151, 27.3.2014

Test 1 – NETB151, 27.3.2014

3749	1.ab	2.ac	3.acd	4.ab	5.cd	(11)
3756	1.ad	2.b	3.bc	4.acd	5.bd	(10)
3763	1.c	2.bd	3.bc	4.a	5.bd	(8)
3770	1.d	2.abd	3.bc	4.abcd	5.c	(11)
3777	1.bc	2.d	3.d	4.acd	5.abc	(10)
3784	1.acd	2.	3.abc	4.abc	5.abcd	(13)
3791	1.cd	2.bcd	3.bd	4.ad	5.abd	(12)
3798	1.ab	2.c	3.cd	4.abd	5.acd	(11)
3805	1.b	2.cd	3.ac	4.ab	5.acd	(10)
3812	1.abd	2.cd	3.ab	4.bd	5.abc	(12)