

Algorithmization Fundamentals and Programming

Elements I სემესტრი. 2020-2021 წელი

(შუალედური გამოცდის ნიმუში)

Question 1

In C++ reserved words must be written:

Select one:

- a. with mixed letters
- b. none of answers is right
- c. with capitals
- d. with small letters

Question 2

What does the comment mean?

Select one:

- a. text between the
- b. text followed the
- c. text inserted in the program, which is ignored by the C++ compiler and not generated as a machine language object code
- d. the form of the management structure

Question 3

What is the purpose of using #include <iostream> instruction

Select one:

- a. for supporting console input-output
- b. none of them
- c. for supporting math functions

Question 4

Between which symbols should the body of the function be inserted?

Select one:

- a. (and)
- b. { and }
- c. [and]
- d. /* and */

Question 5

What's the name of << operation?

Select one:

- a. Assigning
- b. Withdrawal (or displaying)
- c. output operation
- d. Comparison

Question 6

Which managing sequence inserts \ symbol?

Select one:

- a. \a
- b. \\
- c. \t
- d. \"

Question 7

Which is not a type of C++ data ?

Select one:

- a. float;
- b. double;
- c. char;
- d. integer;

Question 8

Which function is started by = = expression?

Select one:

- a. Syntax error, as there is a space left between symbols of equality
- b. Equality check
- c. Comparing line variable by symbols
- d. Assigning operator

Question 9

What is an associativity of the assignment operator?

Select one:

- a. Any direction
- b. To the right from an operation indication sign
- c. From right to the left
- d. From left to the right

Question 10

Pow(x,y) function:

Select one:

- a. Extracts the square root from argument
- b. Rises x to the power of y
- c. Rises y to the power of x
- d. Rounds the first argument by digits of the second argument

Question 11

What will be the result on a console screen of the following fragment of the program code?

```
int x=345, a, b, c;
```

```
x/100;
```

```
x/10%10;
```

```
x%10;
```

```
cout<<a+b+c;
```

Select one:

- a. 36
- b. 12
- c. 24
- d. 32

Question 12

What will be displayed on the screen of a console by entering the following fragment of the code:

```
int a=10,b=2, c;
```

```
a/=5;
```

```
c=a+2*5;
```

```
cout<<c;
```

Select one:

- a. 12
- b. 10
- c. 20
- d. 8

Question 13

What is a decrement operator?
Choose one answer.

Select one:

- a. Decreases the value of variable by given digit;
- b. Increases the value of a variable by 1
- c. Increases the value of variable by given digit;
- d. Decreases the value of a variable by 1

Question 14

The following fragment of the program is given:

```
if ( k%2==0 )
```

```
cout<<k;
```

In which case the value of the variable k will be displayed on the screen of the console?

Select one:

- a. If 2% of k equals 0;
- b. If k is an even number;
- c. If k is an odd number;

Question 15

The following logical variables are given: a=true; b=false; c= false;

What will be the result of the following logical expression?

```
a && !b && c
```

Select one:

- True
- False

Question 16

Student succeeds if he gets 51 points or more, otherwise he fails.

Which expression shows correctly inserted if /else operator?

Select one:

- a. if (grade >= 51) cout << " passed "; else cout << " failed ";
- b. if (grade >= 51) cout << "passed" else "failed";
- c. if grade >= 51 cout << " passed "; else cout << " failed ";
- d. if (grade >= 51) cout << " passed " else cout << " failed ";

Question 17

x=1, y=1, z=0, m=1. What will be value of m after implementation of the following operation?

```
if (x) if (y) if (z) m=5; else m=10; else m=15;
```

Select one:

- a. 10
- b. 5
- c. 1
- d. 15

Question 18

What is a compilation?

Select one:

- a. Implementation of the program on a high level language
- b. Inserting of another text files into the program
- c. Inserting of a standard library files into the program
- d. Checks syntax of the program and switches it to the high level language to the machine code

Question 19

What will the following fragment display on the screen?

```
int a=4, b =2, c;  
switch( b+a ){  
case 6: c =3; break;  
case 12: c =2*a-1; break;  
default: c =a-b;  
}  
cout<<"c = "<<c<<"\n";
```

Select one:

- a. c=7
- b. c=15
- c. c=3

Question 20

Program code is given. Which value of the x will give only Test2?

```
switch (x) {  
case 1 :  
cout<<"Test1";  
case 2 :  
cout<<"Test3";  
break;  
case 3 :  
cout<<"Test2";  
break;  
}
```

Select one:

- a. 4
- b. 1
- c. 2
- d. 3
- e. 0