KAZAKH KBTU **BRITISH**
T E C H N I C A L
U N I V E R S I T Y

KAZAKH-BRITISH TECHNICAL UNIVERSITY
FACULTY OF INFORMATION TECHNOLOGIES
Course: Programming Principles I   **Date:** 14/12/2019
Variant: 1

If you have multiple answers for one question write them all

1.	5.	9.	13.	17.
2.	6.	10.	14.	18.
3.	7.	11.	15.	19.
4.	8.	12.	16.	20.

1. Which of the following data types takes 1 byte of memory?

   (a) int
   (b) long long
   (c) char +
   (d) double

2. Logical operator XOR is denoted by:

   (a) %
   (b) #
   (c) ^ +
   (d) —

3. What is the output of following program?

```cpp
#include <iostream>
using namespace std;
int main(){
    int x = 15, y = 20;
    x += 23;
    y++;
    cout << x % y;
    return 0;
}
```

(a) 19

(b) 17+

(c) 3

(d) None of them

4. What is the output of following program?

```cpp
#include <iostream>
using namespace std;
int main(){
    int x = 7, y = 2, cnt = -1;
    while(x > y){
        if(x % y == 0){
            cnt++;
        }
        x--;
    }
    cout << cnt;
    return 0;
}
```

(a) 2+

(b) 1

(c) 3

(d) None of them

5. What is the output of following program?

```cpp
#include <iostream>
using namespace std;
int main(){
    int n = 14;
    for(int i = 1; i < n; i *= 3){
        cout << 2 * i <<" ";
    }
    return 0;
}
```

(a) 2 4 6 8 10 12 14 16 18 20 22 24 26

(b) 2 6 18 +

(c) 4 12

(d) None of them