



**UNIVERSITY OF MINES AND TECHNOLOGY, TARKWA**  
**SECOND SEMESTER EXAMINATIONS, MAY 2018**

**COURSE NO:** MA 478 [Unihubgh.com](http://Unihubgh.com)  
**COURSE NAME:** PROGRAMMING WITH C++ AND JAVA  
**CLASS:** MA IV **TIME: 3 HOURS**

Name: \_\_\_\_\_ Index Number: \_\_\_\_\_

**Instructions: Answer all the questions on the question paper**

- 1) C++ is an extension of C, which was developed by ..... at Bell Laboratories during 1983–1985.
- 2) The features of C are supported by .....An international standard for C++, known as C++98, was created by the International Standard Organization (ISO) in .....and currently .....
- 3) ..... uses C++ syntax, it is easy to learn Java if you know C++.
- 4) The library like ..... is called a header file in C++, because it is usually included at the head of a program.
- 5) C++ programs are built from pieces called ..... and .....
- 6) A string must be enclosed in .....The value ..... indicates that the program has terminated with a successful exit.
- 7) In C++, a comment is preceded by two slashes (//) on a line, called a .....
- 8) Like any other programming language, C++ has its own rules of grammar, called .....The C++ compiler command performs three tasks in sequence namely ....., ....., and .....
- 9) The machine-code file is also known as an .....
- 10) Give the output of the code below  

```
Int main ()  
{  
Cout << "celcius 35 is fahrenheit degree" << endl;  
Cout << (9/5) * 35 + 32 << endl;  
Return 0;  
.....
```
- 11) The .....object along with the stream insertion operator (<<) can be used to display a string on the console.
- 12) Every statement in C++ must end with a ....., known as the statement terminator.
- 13) .....are programming units that represents complex operations

- 14) Variables are used to represent values that may be changed in the program. T/F
- 15) A variable must be ..... before it can be assigned a value.
- 16) A variable declared in a function must be ..... Otherwise, the variable is called uninitialized and its value is unpredictable.
- 17) Fix the error in the code above;

```

Int main ()
{
Int i = k + 1;
Cout << I << endl;
Int i = 1;
Cout << i << endl;
Return 0;
}

```

- 18) A named constant is an identifier that represents a .....value.
- 19) The word .....is a C++ keyword for declaring a constant.

Fill the spaces in the table if necessary;

| Name   | Synonymy | Storage Size |
|--------|----------|--------------|
| Short  |          |              |
| long   |          |              |
| float  |          |              |
| double |          |              |

- 20) If you know the value stored in a variable is always nonnegative, declare it as .....
- 21) The ..... type is usually twice as big as .....In C++, the .....operator is for integers only.
- 22) The operators +, -, \*, /, and % can be combined with the assignment operator to form .....operators.
- 23) There are no spaces in the augmented assignment operators. For example, + = should be +=. T/F

24) Show the printout of the following code

```

Int a = 6;
a *= a + 1;
cout << a << endl;
a /= 2;
cout << a << endl;

```

- 25) The increment (++) and decrement (--) operators are for incrementing and decrementing a variable by 1. T/F

26) Show the printout of the code below

```
Int a = 6;  
Int b = a++;  
Cout << a <<endl;  
Cout << b << endl;
```

27) Give the output of the code below

```
Int a = 6;  
Int b = ++a;  
Cout << a <<endl;  
Cout << b << endl;
```

28) The .....function can be used to compute  $a^b$ .

29) pow is a function defined in the ..... library.

30) The program can decide which statements to execute based on its information. T/F

31) A ..... expression is an expression that evaluates to a Boolean value: true or false.

32) C++ provides eight relational operators, which can be used to compare two values. T/F

33) An ..... statement is a construct that enables a program to specify alternative path of execution.

34) Give the syntax for one-way if statement

35) Correct the code below

```
If i > 0;  
{  
Cout << "I is positive" << endl;  
}
```

36) Duplicated statements in if-else statements and testing equality of double values are common pitfalls. T/F

37) The ..... can be omitted if the block contains a single statement.

38) The logical operators !, &&, and || can be used to create a compound Boolean expression. T/F

Complete the table below

| Operator | Name | Description |
|----------|------|-------------|
| !        |      |             |
| &&       |      |             |
|          |      |             |
|          |      |             |