

TAKORADI TECHNICAL UNIVERSITY  
FACULTY OF APPLIED SCIENCE  
DEPARTMENT OF COMPUTER SCIENCE  
END OF SECOND SEMESTER EXAMINATION 2020/2021  
BTECH ICT - LEVEL 100

COURSE: C++ PROGRAMMING  
AUGUST 2021

COURSE CODE: CSC313  
DURATION: 2HRS

SECTION A: (20 MARKS) – 30 MIN *Answer all questions*

1. In a function, the following is true
  - a. a left brace must begin the body of the function
  - b. a corresponding right brace must end each function's body
  - c. all of the above
  - d. none of the above
2. A semi-colon is used in the following except
  - a. After the right ending brace of a function's body
  - b. After a function declaration statement
  - c. After a variable declaration statement
  - d. After an arithmetic logic statement
3. Concerning a string, which of the following is true
  - a. White space characters in strings are ignored by compiler
  - b. String in double quotes is not a character string
  - c. String in double quotes is sometimes referred to as character string
  - d. Strings are the same as characters
4. A valid C++ identifier has the following features except
  - a. Identifiers cannot start with a digit
  - b. Identifier can be a C++ keyword
  - c. Identifiers may include an underscore (`_`)
  - d. Identifiers may be of any length
5. The `#include<iostream>` in C++ does the following except
  - a. Tells the C++ pre-processor to include input/output header file
  - b. Contains information necessary to compile programs that use `cin` and `cout`
  - c. Contains information necessary to compile the operators `<<` and `>>`
  - d. None of the above



Use the following code below to answer questions 6 to 8

```
#include<iostream>
using namespace std;
int main()
{
    int a, b
    a=5;
    cout<<a<<"and"<<b;
    system("pause");
    return 0;
}
```

6. The code above will not run because there is a syntax error
  - a. True
  - b. False
  - c. Invalid point
  - d. None of the above
7. Which of the following is True?
  - a. There is an error in the first line of the code
  - b. A semi-colon is required at the end of the first line in the code
  - c. All of the above
  - d. None of the above
8. Which of the following is not true about the function **main**
  - a. It takes two parameters
  - b. It returns an integer value
  - c. All of the above
  - d. None of the above
9. The following is true of the modulus operator %
  - a. Works only with integer operands
  - b. Yields the remainder after division
  - c. All of the above
  - d. None of the above
10. In an **if** statement the following is true except
  - a. The condition is enclosed in two brackets ()
  - b. The statement of the condition may follow with or without curly brackets {}
  - c. It allows a program to make a decision when certain conditions are met
  - d. None of the above
11. Consider the two lines code in a C++ program below and select which option is true

```
cout << "This is a C++ program\n";
cout << "\tThis is a C++ program";
```

  - a. The first line is wrong
  - b. The first line will output **This is a C++ program\n**
  - c. The second line will create a tab space before outputting the string
  - d. None of the above



12. Given the algebraic expression  $y = ax^3 + 7$  which of the following, is a correct C++ statement for this equation?

- a.  $y = a * (x * x * x) + 7;$
- b.  $y = a * x * x * (x + 7);$
- c.  $y = a * x * x * x + 7;$
- d.  $y = (a * x) * x * (x + 7);$

13. In a repetitive statement...

- a. A condition must be met
- b. An action is repeated while the condition remains true
- c. All of the above
- d. None of the above

14. Consider the following code and select which error needs correction

```
while ( c <= 5 )  
{  
cin<<c;  
product *= c;  
c++;
```

- a. Change << to >> on line 3
- b. Add } on line 6
- c. All of the above
- d. All the code is correct

15. Every class definition contains the keyword \_\_\_\_\_ followed immediately by the class's name.

- a. Class
- b. Float
- c. Datatype
- d. function

16. The following is true about variables

- a. Local variables can only be used only in member functions
- b. Global variables can only be used outside the member functions
- c. All of the above
- d. None of the above

17. Each parameter in a function header should specify both a(n) \_\_\_\_\_ and a(n) \_\_\_\_\_

- a. Scope, name
- b. Type, name
- c. Access specifier, type
- d. Void , operator

18. When each object of a class maintains its own copy of an attribute, the variable that represents the attribute is also known as a(n) \_\_\_\_\_.

- a. Data type
- b. Access specifier
- c. Data member
- d. Object



19. Return type \_\_\_\_\_ indicates that a function will perform a task but will not return any information when it completes its task

- a. Void
- b. Object
- c. Int
- d. string

20. The keyword **public** is a(n) \_\_\_\_\_.

- a. Class
- b. Data type
- c. Object
- d. Access specifier

### SECTION B: ANSWER ALL (20MARKS) – 30MIN

Answer **True** or **False** to each of the questions in this section and explain the reason if your answer is false.

1. Every C++ program begins execution at the function **main**
2. C++ considers the variables **number** and **NuMbEr** to be identical. (2marks)
3. Comments are used to document a program and improve its readability. (2marks)
4. There should be a semicolon after the parenthesis of an **if** statement (2marks)
5. The default case is required in the switch selection statement. (2marks)
6. The break statement is required in the default case of a switch selection statement to exit the switch properly. (2marks)
7. A variable that is known only within the function in which it is defined is called a local variable. (2marks)
8. All arguments to function calls in C++ are passed by value (2marks)
9. An array subscript should normally be of data type float (2marks)
10. An array can store many different types of values. (2marks)