



Republic of the Philippines
SULTAN KUDARAT STATE UNIVERSITY
COLLEGE OF COMPUTER STUDIES
Isulan Campus, Isulan, Sultan Kudarat



Course Number / Description: CC112 (PROGRAMMING 1)

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Term : Midterm Examination

Semester: First Semester

Date: 10/10/2024

TABLE OF SPECIFICATIONS

Topics / Content		Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	No. of Item	Score
I	Introduction to Computers	4 (1,2,7,8)						4	4
II	Introduction to Programming	9 (3-5,10,15, 16,19, 25, 29)	3 (43,48, 53)					12	15
III	Introduction to C++	11 (11-14, 17, 18,20-22,24, 26)	8 (44-47, 49,50,52,56)		1 (41)			20	29
IV	Variables	3 (23,27,30)	7 (51,54,55,57-60)	1 (61)	6 (42, 63-67)			17	34
V	Selection Structures	3 (6,9,28)		1 (62)	10 (31-40)			14	28
Total Number of Items		30	18	2	17			67	
Total Score		30	36	10	34				110
		%	27.27%	9.09%	30.91%				100%

Summary		No. of Points
Test I		30
Test II - A		20
Test II - B		40
Test III -		20
Total Score		110

Checked : **MARK JOVIC A. DADAY**

Date:



Name: _____

Crs. /Yr. /Section: _____ Score: _____

CC 112 – PROGRAMMING 1

Midterm Examination

October 17 - 19, 2024

I. FILL IN THE BLANKS. Fill in the blanks for each of the following statements. Write your answer in the space provided before the number. **(30 pts)**

- _____ 1. The _____ directs the computer to process the program instructions one after another.
- _____ 2. Instruction written in 0s and 1s is called _____.
- _____ 3. _____ refers to a statement that evaluates to a value.
- _____ 4. _____ is a set of instructions or operations.
- _____ 5. _____ is considered the first programmer.
- _____ 6. _____ it makes a decision and then takes an appropriate action based on that decision.
- _____ 7. _____ are used for running scripts, such as those used to generate content for dynamic websites.
- _____ 8. An assembly program requires an _____ to convert instructions into machine code.
- _____ 9. _____ directs the computer to repeat one or more instructions until one condition is met.
- _____ 10. _____ deals with the meaning of the programming language.
- _____ 11. C++ systems consist of a program development environment, the language, and the C++ _____.
- _____ 12. The _____ links the object code with the libraries.
- _____ 13. _____ it is used to print double-quote characters.
- _____ 14. Every C++ program begins execution at the function _____.
- _____ 15. _____ is the process of designing, writing, testing, debugging, and maintaining the source code of computer programs.
- _____ 16. _____ is a sequence of precise instructions that leads to a solution.
- _____ 17. Blank lines, space characters, and tabs are known as _____.
- _____ 18. The _____ type of data stores character value.
- _____ 19. The _____ translates the C++ program into machine language.
- _____ 20. The parentheses after the main indicate that the main is a program building block called _____.
- _____ 21. The semicolon in every statement is known as _____.
- _____ 22. In the output statement, the << operator is referred to as the _____.
- _____ 23. _____ is a reserved memory location to store values.
- _____ 24. In a C++ system, a(n) _____ program executes before the compiler's translation phase begins.
- _____ 25. _____ instructs the computer to perform an action.
- _____ 26. _____ is a word in a code that C++ reserves for a specific use.
- _____ 27. _____ is the quantity that cannot be changed during program execution.
- _____ 28. _____ used to compare more than one condition.
- _____ 29. _____ is an artificial and informal language that helps programmers develop algorithms.
- _____ 30. _____ refers to assigning a value to a variable at the time of declaration.

II. TRUE or FALSE

A. Evaluate the expressions below. Write **TRUE** if the final result is TRUE otherwise, write the word **FALSE**. (2 points each)

Initial value for: $a = 10$; $b = 6$; $c = 8$;

- _____ 31. $((a > c) \parallel (b < c)) \&\& (b \neq c)$
- _____ 32. $(a == 10) \&\& ((a > 8) \&\& (c < 10))$
- _____ 33. $(c == 3 \parallel a \neq 10) \&\& (a \geq c)$
- _____ 34. $(a \geq b \parallel a \neq 10) \&\& (b \geq c)$
- _____ 35. $((a \geq c) \&\& (b \neq c)) \parallel ((c == 8) \neq (a > b))$
- _____ 36. $((b == 10) \&\& ((c == 6) \parallel (b == 6)))$
- _____ 37. $((c == 8) \neq (b < 15)) \parallel (c == 10)$
- _____ 38. $(10 > c) \parallel ((b \leq a) \&\& (5 \leq a))$
- _____ 39. $(c \neq b) \&\& ((a \geq b) \parallel (c \neq b))$
- _____ 40. $((\text{true} \parallel \text{false}) \&\& (\text{true} \parallel \text{true})) \&\& \text{true}$

B. State whether the following statements are TRUE or FALSE. Write **TRUE** if the statement is correct, otherwise, write the word **FALSE**. (2 pts. Each)

- _____ 41. Compiling the program is the 3rd step in writing a program.
- _____ 42. The variable 10minutes, #exam, 2Chances is a valid variable.
- _____ 43. A flowchart is the graphical representation of an algorithm.
- _____ 44. The loader puts the program in memory.
- _____ 45. `/* */` indicates a single comment in a program.
- _____ 46. Every program should begin with a comment that describes the purpose of the program.
- _____ 47. Black space characters are ignored by the compiler.
- _____ 48. A bits is the smallest data item in a computer.
- _____ 49. Every C++ statement ends with a semicolon
- _____ 50. The backslash (\) is called an escape character.
- _____ 51. A good identifier should be descriptive and long.
- _____ 52. `cin` and `cout` is an example of user-defined identifiers.
- _____ 53. The first phase of C++ programming language is the preprocessing.
- _____ 54. Character values are given in the double quotation.
- _____ 55. The exponent is always a real number.
- _____ 56. C++ keyword can be used as a variable name.
- _____ 57. `int`, `float`, and `double` are real data type.
- _____ 58. Variables can be initialized during the declaration.
- _____ 59. The literal constant is a value that is typed directly in a program.
- _____ 60. The modulus (%) operator is designed to be used in integer operands.

III. GUESS ME. Write the possible output of the program or find the value of x.

61. 5 points

```
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     int a = 12, b = 8, x = 5, y = 8;
7     b = a--;
8     y = --x;
9
10    cout << "a = " << a << endl << "b = " << b << endl;
11    cout << "x = " << x << endl << "y = " << y << endl;
12 }
```

(2 points each)

- 63. $x = 20 / 5 + 6 / 2 - 1$;
- 64. $x = 8 \% 8 + 2 * 2 - 8 / 2$;
- 65. $x = 5 * 8 - 19 + 4 * 16 / 4 + 8$;
- 66. $x = 100.0 + 15.0 * 80.0 / 20.0$;
- 67. $x = 36 * 3 + 80 / 4$;

62.

```
#include <iostream>
using namespace std;

int main()
{
    int grade = 80;

    switch (grade)
    {
        case 100:
            cout << "Your numerical rating: 1:00";
            break;
        case 99:
            cout << "Your numerical rating: 1:00";
            break;
        default:
            cout << "Please enter another number";
    }
}
```

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