

## LEARNING OUTCOMES AND ASSESSMENT MEASURES:

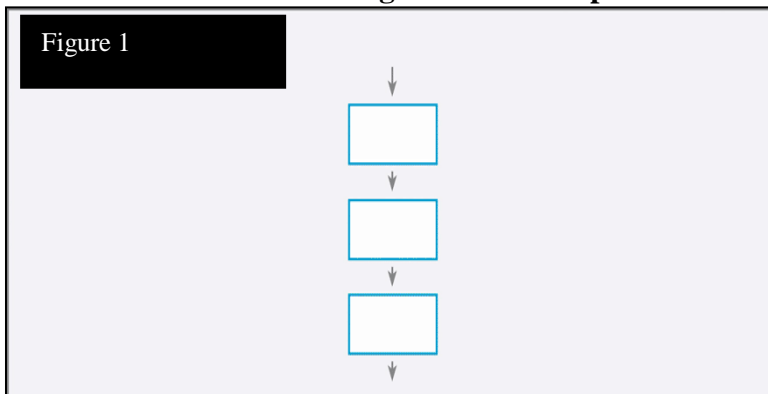
- 1. What are the 4 basic computer operations?**
  - a. data, information, input, output
  - b. byte, process, output, storage
  - c. load, store, execute, memory
  - d. input, output, process, storage
  
- 2. What is the correct order of the instruction cycle?**
  - a. increment pointer, execute, interpret, fetch
  - b. fetch, execute, interpret, increment pointer
  - c. increment pointer, interpret, execute, fetch
  - d. fetch, interpret, execute, increment pointer
  
- 3. What makes up a machine instruction?**
  - a. an opcode and output
  - b. instructions
  - c. operands
  - d. an opcode and operands
  
- 4. What are the components of a computer?**
  - a. mouse, scanner, printer, memory
  - b. input devices, output devices, communications devices, memory, processor
  - c. motherboard, monitor, memory, input devices, output devices, processor
  - d. storage devices, input devices, output devices, communications devices, memory, processor
  
- 5. What is the correct order of steps in the programming process?**
  - a. Understand, Plan, Code, Compile, Debug, Test, Put in production
  - b. Plan, Code, Test, Debug, Put in production
  - c. Understand, Plan, Code, Compile, Test, Debug, Put in production
  - d. Put in production, Understand, Plan, Code, Compile, Test, Debug
  
- 6. What flowchart symbol is a parallelogram?**
  - a. input/output
  - b. processing
  - c. terminal
  - d. decision
  
- 7. What flowchart symbol is a diamond?**
  1. input/output
  2. processing
  3. terminal
  4. decision

- 8. What symbol represents a flowline?**
- an arrow
  - a rectangle
  - a lozenge
  - a circle
- 9. Which of the following statements displays the contents of a variable *number*, in pseudocode?**
- get number
  - print number
  - cout << number << endl;
  - load number
- 10. Which one of the following pseudocode statements correctly computes the average of five numbers?**
- average = num1 + num2 + num3 + num4 + num5 / 5
  - average = (num1 + num2 + num3 + num4 + num5 / 5)
  - average = (num1 + num2 + num3 + num4 + num5) / 5
  - average = num1 + num2 + num3 + num4 + num5 / (5)
- 11. Which of the following are programming techniques?**
- object-oriented
  - function-oriented
  - procedural
  - a and b
  - a and c
- 12. Which one of the following is considered to be a low-level programming language?**
- Java
  - C++
  - Visual Basic
  - Assembler
- 13. Which one of the following is not a high-level programming language?**
- C
  - COBOL
  - Windows XP
  - Java
- 14. Object-oriented programming involves creating objects, describing their functions and attributes, and how they interact with other objects.**
- TRUE
  - FALSE

15. What are the three basic structures of any programming language?

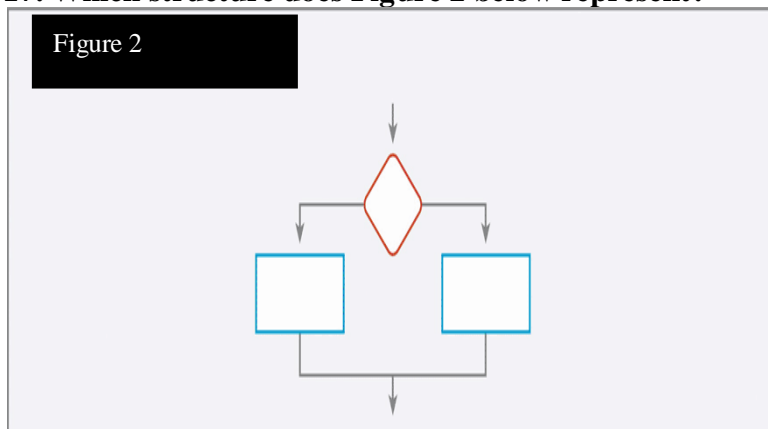
- a. loop, stacking, nesting
- b. loop, selection, sequence
- c. selection, sequence, nesting
- d. repetition, loop, sequence

16. Which structure does Figure 1 below represent?



- a. sequence
- b. selection
- c. loop

17. Which structure does Figure 2 below represent?



- a. sequence
- b. selection
- c. loop

18. What does a hierarchy chart do?

- a. plans the logic of a program
- b. defines a location in memory
- c. illustrates relationships among modules
- d. gives instructions on maintaining a program

**19. Why are modules useful?**

- a. provide structure
- b. allow multiple programmers to work on a problem
- c. create friendly environment for the user
- d. both a and b
- e. both a and c

**20. What is internal documentation?**

- a. flowcharts
- b. comments
- c. pseudocode
- d. research papers

**21. External documentation is supporting paperwork that programmers develop before they write their programs.**

- a. TRUE
- b. FALSE

**22. What is the output from the pseudocode below?**

```
{  
    float price = 98.69;  
    float tax = 1.08;  
    float total;  
  
    total = price * tax;  
  
    print total;  
}
```

- a. 100.67
- b. 106.59
- c. 106
- d. 98.69

**23. What is the output from the pseudocode below?**

```
{
    float score1, score2, avg;
    string grade;

    score1 = 72.6;
    score2 = 93.0;
    avg = ( score1 + score2 ) / 2;
    if ( avg > 90 ) then
        grade = "A";
    else
        grade = "B";

    print grade;
}
```

- a. grade
- b. A
- c. B
- d. 82.8

**24. What is the output from the pseudocode below?**

```
{
    int x = 6, y = 1, z = 22;

    if ( x < 5 || x < -1 ) then
        print x;
    else-if ( y > 5 ) then
        print y;
    else
        print z;
}
```

- a. 6
- b. 1
- c. 22
- d. 5

**25. What is the function of the *break* statement?**

- a. skips an iteration of a loop
- b. terminates the execution of a loop
- c. ends a program
- d. calls a function

**26. What is an array?**

- a. a datatype
- b. a loop structure
- c. a function that returns a value
- d. a variable that can store multiple values of the same type

**27. Using Visual C++, write a C++ program that displays the string literal “*Hello World!*” (without the quotes).**