

Exam

Name \_\_\_\_\_

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) What statement best describes a variable and its primary purpose? 1) \_\_\_\_\_
- A) A variable is a structured, general-purpose language designed primarily for teaching programming.
  - B) A variable is a named storage location in the computer's memory used for holding a piece of information.
  - C) A variable is a "line" of code in the body of a program, which may change.
  - D) A variable is a collection of eight bits.
  - E) A variable is a word that has a special meaning to the compiler.

Answer: B  
Diff: 0 Type: MC

- 2) Which of the following is a preprocessor directive? 2) \_\_\_\_\_
- A) `cin >> rate;`
  - B) `// This program calculates the user's pay.`
  - C) `int main()`
  - D) `pay = hours * rate;`
  - E) `#include <iostream>`

Answer: E  
Diff: 0 Type: MC

- 3) The \_\_\_\_\_ decodes an instruction and generates electrical signals. 3) \_\_\_\_\_
- A) Arithmetic and Logic Unit
  - B) BIOS
  - C) Control Unit
  - D) Main memory
  - E) None of the above

Answer: C  
Diff: 0 Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 4) True/False: Software engineering is a field that encompasses designing, writing, testing, debugging, documenting, modifying, and maintaining computer programs. 4) \_\_\_\_\_

Answer:  True  False  
Diff: 0 Type: TF

- 5) True/False: The preprocessor executes after the compiler. 5) \_\_\_\_\_

Answer:  True  False  
Diff: 0 Type: TF

- 6) True/False: In C++, key words are written in all lowercase letters. 6) \_\_\_\_\_

Answer:  True  False  
Diff: 0 Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 7) \_\_\_\_\_ are used to translate each source code instruction into the appropriate machine language instruction. 7) \_\_\_\_\_
- A) Library routines
  - B) Modules
  - C) Compilers
  - D) Preprocessor directives
  - E) None of the above

Answer: C

Diff: 0 Type: MC

- 8) Three primary activities of a program are: 8) \_\_\_\_\_
- A) Input, Processing, and Output
  - B) Variables, Operators, and Key Words
  - C) Lines, Statements, and Punctuation
  - D) Integer, Floating-point and Character
  - E) None of the above

Answer: A

Diff: 0 Type: MC

- 9) During which stage does the central processing unit retrieve from main memory the next instruction in the sequence of program instructions? 9) \_\_\_\_\_
- A) execute
  - B) portability stage
  - C) decode
  - D) fetch

Answer: D

Diff: 0 Type: MC

- 10) Even when there is no power to the computer, data can be held in: 10) \_\_\_\_\_
- A) The Output Device
  - B) The Algorithm
  - C) The Input Device
  - D) Secondary storage
  - E) None of the above

Answer: D

Diff: 0 Type: MC

- 11) In a broad sense, the two primary categories of programming languages are: 11) \_\_\_\_\_
- A) Mainframe and PC
  - B) Low-level and High-level
  - C) Hardware and Software
  - D) COBOL and BASIC
  - E) None of the above

Answer: B

Diff: 0 Type: MC

- 12) An Integrated Development Environment typically consists of: 12) \_\_\_\_\_
- A) A debugger
  - B) A text editor
  - C) A compiler
  - D) All of the above
  - E) None of the above

Answer: D

Diff: 0 Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 13) True/False: Programs are commonly referred to as hardware. 13) \_\_\_\_\_

Answer: True  False

Diff: 0 Type: TF

- 14) True/False: Machine language is an example of a high-level language. 14) \_\_\_\_\_

Answer: True  False

Diff: 0 Type: TF

- 15) True/False: Pseudocode is a form of program statement that will always evaluate to "false." 15) \_\_\_\_\_

Answer: True  False

Diff: 0 Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 16) In the process of translating a source file into an executable file, which of the following is the correct sequence? 16) \_\_\_\_\_

- A) Source code, preprocessor, modified source code, linker, object code, compiler, executable code.
- B) Source code, linker, object code, compiler, modified source code, preprocessor, executable code.
- C) Source code, preprocessor, modified source code, compiler, object code, linker, executable code.
- D) Preprocessor, source code, compiler, executable code, linker, modified source code, object code.
- E) Source code, compiler, modified source code, preprocessor, object code, linker, executable code.

Answer: C

Diff: 0 Type: MC

- 17) Words that have a special meaning and may be used only for their intended purpose are known as: 17) \_\_\_\_\_

- A) Key Words
- B) Programmer Defined Words
- C) Syntax
- D) Operators
- E) None of the above

Answer: A

Diff: 0 Type: MC

18) Which of the following best describes an operator? 18) \_\_\_\_\_  
A) An operator is a word that has a special meaning.  
B) An operator is a rule that must be followed when constructing a program.  
C) An operator allows you to perform operations on one or more pieces of data.  
D) An operator is a symbolic name that refers to a variable.  
E) An operator marks the beginning or ending of a statement, or is used to separate items in a list.

Answer: C  
Diff: 0 Type: MC

19) What does the term *hardware* refer to? 19) \_\_\_\_\_  
A) The way a computer's storage space is organized  
B) The logical flow of instructions  
C) The relative difficulty of programming  
D) The physical components that a computer is made of  
E) None of the above.

Answer: D  
Diff: 0 Type: MC

20) The programming process consists of several steps, which include: 20) \_\_\_\_\_  
A) Design, Creation, Testing, and Debugging  
B) Key Words, Operators, and Punctuation  
C) Syntax, Logic, and Error Handling  
D) Input, Processing, and Output  
E) None of the above

Answer: A  
Diff: 0 Type: MC

21) This is a complete instruction that causes the computer to perform some action. 21) \_\_\_\_\_  
A) Key Word  
B) Variable  
C) Statement  
D) Line  
E) None of the above

Answer: C  
Diff: 0 Type: MC

22) A(n) \_\_\_\_\_ is a set of instructions that the computer follows to solve a problem. 22) \_\_\_\_\_  
A) Program  
B) Compiler  
C) Linker  
D) Operator  
E) None of the above

Answer: A  
Diff: 0 Type: MC

23) This is a volatile type of memory, used for temporary storage. 23) \_\_\_\_\_  
A) Disk drive  
B) Address  
C) RAM  
D) ALU  
E) None of the above

Answer: C  
Diff: 0 Type: MC

24) Computer programs are also known as: 24) \_\_\_\_\_  
A) firmware  
B) software  
C) silverware  
D) hardware  
E) None of the above

Answer: B  
Diff: 0 Type: MC

25) The name for a memory location that may hold data is: 25) \_\_\_\_\_  
A) Syntax  
B) Operator  
C) Variable  
D) Key Word  
E) None of the above

Answer: C  
Diff: 0 Type: MC

26) This is used in a program to mark the beginning or ending of a statement, or separate items in a list. 26) \_\_\_\_\_  
A) Separators  
B) Operators  
C) Key Words  
D) Punctuation  
E) None of the above

Answer: D  
Diff: 0 Type: MC

27) This is a set of rules that must be followed when constructing a program. 27) \_\_\_\_\_  
A) Operators  
B) Key words  
C) Punctuation  
D) Syntax  
E) Portability

Answer: D  
Diff: 0 Type: MC

- 28) Which of the following is a common input device? 28) \_\_\_\_\_
- A) Microphone
  - B) Scanner
  - C) Keyboard
  - D) Mouse
  - E) All of the above

Answer: E  
Diff: 0 Type: MC

- 29) A variable declaration announces the name of a variable that will be used in a program, as well as: 29) \_\_\_\_\_
- A) The area of the code in which it will be used
  - B) The type of data it will be used to hold
  - C) The operators that will be used on it
  - D) The number of times it will be used in the program
  - E) None of the above

Answer: B  
Diff: 0 Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 30) True/False: The term "bit" stands for binary digit. 30) \_\_\_\_\_

Answer:  True  False  
Diff: 0 Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 31) A(n) \_\_\_\_\_ is a diagram that shows the logical flow of a program. 31) \_\_\_\_\_
- A) hierarchy chart
  - B) flowchart
  - C) UML diagram
  - D) program schematic
  - E) None of these

Answer: B  
Diff: 0 Type: MC

- 32) A(n) \_\_\_\_\_ is the most fundamental set of programs on a computer. 32) \_\_\_\_\_
- A) application
  - B) operating system
  - C) utility program
  - D) compiler
  - E) None of these

Answer: B  
Diff: 0 Type: MC

- 33) The computer's main memory is commonly known as: 33) \_\_\_\_\_
- A) Secondary storage
  - B) The floppy disk
  - C) RAM
  - D) The hard disk
  - E) None of the above

Answer: C

Diff: 0 Type: MC

- 34) The statements written by the programmer are called: 34) \_\_\_\_\_
- A) Runtime libraries
  - B) Source code
  - C) Syntax
  - D) Object code
  - E) None of the above

Answer: B

Diff: 0 Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 35) True/False: The CPU is the most important component in a computer because without it, the computer could not run software. 35) \_\_\_\_\_

Answer:  True  False

Diff: 0 Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 36) An example of a secondary storage device is: 36) \_\_\_\_\_
- A) The keyboard
  - B) The monitor
  - C) The computer's main memory
  - D) The disk drive
  - E) None of the above

Answer: D

Diff: 0 Type: MC

- 37) At the heart of a computer is its central processing unit. The CPU's job is: 37) \_\_\_\_\_
- A) To fetch instructions
  - B) To produce some outcome or resultant information
  - C) To carry out the operations commanded by the instructions
  - D) All of the above
  - E) None of the above

Answer: D

Diff: 0 Type: MC

38) Programmer-defined names of memory locations that may hold data are: 38) \_\_\_\_\_  
A) Variables  
B) Operators  
C) Operands  
D) Syntax  
E) None of the above

Answer: A  
Diff: 0 Type: MC

39) This step will uncover any syntax errors in your program. 39) \_\_\_\_\_  
A) Linking  
B) Executing  
C) Editing  
D) Compiling  
E) None of these

Answer: D  
Diff: 0 Type: MC

40) The programmer usually enters source code into a computer using: 40) \_\_\_\_\_  
A) Pseudocode  
B) A compiler  
C) A text editor  
D) A hierarchy chart  
E) None of the above

Answer: C  
Diff: 0 Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

41) True/False: A CPU really only understands instructions that are written in machine language. 41) \_\_\_\_\_  
Answer:  True  False  
Diff: 0 Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

42) Characters or symbols that perform operations on one or more operands are: 42) \_\_\_\_\_  
A) Program ops  
B) Op codes  
C) Operators  
D) Syntax  
E) None of the above

Answer: C  
Diff: 0 Type: MC



43) Mistakes that cause a running program to produce incorrect results are called: 43) \_\_\_\_\_  
A) Logic errors  
B) Linker errors  
C) Syntax errors  
D) Compiler errors  
E) None of the above

Answer: A  
Diff: 0 Type: MC

44) This term refers to the programmer reading the program from the beginning and stepping through each statement. 44) \_\_\_\_\_  
A) Pseudocoding  
B) Software Engineering  
C) Spot Checking  
D) Desk Checking  
E) None of the above

Answer: D  
Diff: 0 Type: MC

45) A set of well-defined steps for performing a task or solving a problem is known as a(n): 45) \_\_\_\_\_  
A) Encoded instruction  
B) Hierarchy  
C) Central Processing Unit  
D) Algorithm  
E) None of the above

Answer: D  
Diff: 0 Type: MC

46) Internally, the CPU consists of two parts: 46) \_\_\_\_\_  
A) The Single-task Device and the Multi-task Device  
B) The Output Device and the Input Device  
C) The Software and the Hardware  
D) The Control Unit and the Arithmetic and Logic Unit  
E) None of the above

Answer: D  
Diff: 0 Type: MC

47) The purpose of a memory address is: 47) \_\_\_\_\_  
A) To identify the location of a byte in memory  
B) To improve the effectiveness of high-level languages  
C) To obtain an algorithm  
D) To prevent multitasking  
E) None of the above

Answer: A  
Diff: 0 Type: MC

- 48) Which of the following is not one of the five major components of a computer system? 48) \_\_\_\_\_
- A) The CPU (central processing unit)
  - B) Preprocessor
  - C) Input/Output device
  - D) Secondary storage device
  - E) Main memory

Answer: B

Diff: 0 Type: MC

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 49) True/False: In programming, the terms "line" and "statement" always mean the same thing. 49) \_\_\_\_\_

Answer: True  False

Diff: 0 Type: TF

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 50) During which stage does the central processing unit analyze the instruction and encode it in the form of a number, and then generate an electronic signal? 50) \_\_\_\_\_

- A) execute
- B) fetch
- C) portability stage
- D) decode

Answer: D

Diff: 0 Type: MC

Answer Key  
Testname: CH1

- 1) B  
Diff: 0 Page Ref:  
Topic:
- 2) E  
Diff: 0 Page Ref:  
Topic:
- 3) C  
Diff: 0 Page Ref:  
Topic:
- 4) TRUE  
Diff: 0 Page Ref:  
Topic:
- 5) FALSE  
Diff: 0 Page Ref:  
Topic:
- 6) TRUE  
Diff: 0 Page Ref:  
Topic:
- 7) C  
Diff: 0 Page Ref:  
Topic:
- 8) A  
Diff: 0 Page Ref:  
Topic:
- 9) D  
Diff: 0 Page Ref:  
Topic:
- 10) D  
Diff: 0 Page Ref:  
Topic:
- 11) B  
Diff: 0 Page Ref:  
Topic:
- 12) D  
Diff: 0 Page Ref:  
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- 13) FALSE  
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- 14) FALSE  
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- 15) FALSE  
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Topic:
- 16) C  
Diff: 0 Page Ref:  
Topic:

Answer Key  
Testname: CH1

- 17) A  
Diff: 0 Page Ref:  
Topic:
- 18) C  
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Topic:
- 19) D  
Diff: 0 Page Ref:  
Topic:
- 20) A  
Diff: 0 Page Ref:  
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- 21) C  
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Topic:
- 22) A  
Diff: 0 Page Ref:  
Topic:
- 23) C  
Diff: 0 Page Ref:  
Topic:
- 24) B  
Diff: 0 Page Ref:  
Topic:
- 25) C  
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Topic:
- 26) D  
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- 27) D  
Diff: 0 Page Ref:  
Topic:
- 28) E  
Diff: 0 Page Ref:  
Topic:
- 29) B  
Diff: 0 Page Ref:  
Topic:
- 30) TRUE  
Diff: 0 Page Ref:  
Topic:
- 31) B  
Diff: 0 Page Ref:  
Topic:
- 32) B  
Diff: 0 Page Ref:  
Topic:

## Answer Key

Testname: CH1

- 33) C  
Diff: 0 Page Ref:  
Topic:
- 34) B  
Diff: 0 Page Ref:  
Topic:
- 35) TRUE  
Diff: 0 Page Ref:  
Topic:
- 36) D  
Diff: 0 Page Ref:  
Topic:
- 37) D  
Diff: 0 Page Ref:  
Topic:
- 38) A  
Diff: 0 Page Ref:  
Topic:
- 39) D  
Diff: 0 Page Ref:  
Topic:
- 40) C  
Diff: 0 Page Ref:  
Topic:
- 41) TRUE  
Diff: 0 Page Ref:  
Topic:
- 42) C  
Diff: 0 Page Ref:  
Topic:
- 43) A  
Diff: 0 Page Ref:  
Topic:
- 44) D  
Diff: 0 Page Ref:  
Topic:
- 45) D  
Diff: 0 Page Ref:  
Topic:
- 46) D  
Diff: 0 Page Ref:  
Topic:
- 47) A  
Diff: 0 Page Ref:  
Topic:
- 48) B  
Diff: 0 Page Ref:  
Topic:

## Answer Key

Testname: CH1

49) FALSE

Diff: 0 Page Ref:

Topic:

50) D

Diff: 0 Page Ref:

Topic: