**True or False**

1.Today, CPUs are huge devices made of electrical and mechanical components such as  
vacuum tubes and switches.



2. RAM (Random Access Memory) is a type of volatile memory that is used by the CPU to store data and instructions that are currently being used or processed.



3. Any piece of data that is stored in a computer’s memory must be stored as a binary  
number.



4. Images, like the ones created with your digital camera, cannot be stored as binary  
numbers.



5. Machine language is the only language that a CPU understands.



6. The programming languages, such as Python, Java, or C++, must be translated into machine language through a process called compilation or interpretation before the CPU can execute the instructions.



7. Assembly language is considered a low-level language, not a high-level language.



8. When you run a Python script, the interpreter translates each line into machine code and executes it immediately.



9. A compiler is a program that translates the entire source code of a high-level programming language into machine code (or binary code) in one go, creating an executable file.



10. A syntax error does not prevent a program from being compiled and executed.



11. By forcing developers to fix all errors, the compiler encourages cleaner and more robust code.



12. Java first compiles code into bytecode, which is then executed by the Java Virtual Machine (JVM).



13. Windows, Linux, Android, iOS, and macOS are all examples of application software.



14. Word processing programs, spreadsheet programs, email programs, web browsers, and games are all examples of utility programs.



15. **The append() method in Python can add multiple items to a list at once.**



16. A Python dictionary allows duplicate keys.



17. **The with statement in Python is used for exception handling.**



18. The len() function in Python is used to determine the length of an iterable objects like lists, tuples, and dictionaries and not strings.



19. The break statement in Python is used to exit a loop prematurely.



20. The continue statement is used within loops to skip the remaining code in the current iteration and move on to the next iteration.

