1. What is machine-level language also known as?

a) Binary code

b) Assembly language

c) Low-level language

d) High-level language

2. What consists of instructions directly executed by a computer's hardware?

a) Machine code

b) Assembly code

c) Bytecode

d) Source code

3. What is an advantage of machine-level programming language?

a) Portability

b) Direct control over hardware

c) Easy readability

d) High-level abstraction

4. What is a disadvantage of machine-level programming language?

a) Easy for humans to read and write

b) Tied to specific hardware architecture

c) Requires deep understanding of computer architecture

d) Highly portable

5. What is one step above machine code in programming languages?

a) Machine-level language

b) Assembly language

c) High-level language

d) Scripting language

6. What do low-level programming languages use to represent operations and memory addresses?

a) Binary digits

b) Mnemonics and symbols

c) High-level abstractions

d) English-like syntax

7. Which type of programming language provides a balance between low-level and high-level languages?

a) Machine-level language

b) Low-level language

c) Mid-level language

d) High-level language

8. In which language are instructions represented using mnemonics like MOV for move and ADD for addition?

a) Java

b) Python

c) x86 Assembly

d) COBOL

9. What type of programming languages provide powerful constructs for solving complex problems?

a) Machine-level language

b) Low-level language

c) High-level language

d) Assembly language

10. What is an advantage of high-level programming languages?

a) Direct control over hardware

b) Portability across platforms

c) Closer to machine code

d) Efficient use of system resources

11. Which language introduced structured programming concepts like loops and blocks?

a) Fortran

b) COBOL

c) ALGOL

d) LISP

12. Which programming language is known for its readability and English like syntax?

a) Fortran

b) COBOL

c) LISP

d) ALGOL

13. Who were the creators of the Java programming language?

a) Bill Gates and Paul Allen

b) Steve Jobs and Steve Wozniak

c) James Gosling and Mike Sheridan

d) Linus Torvalds and Richard Stallman

14. When was Java officially announced to the public?

a) 1985

b) 1995

c) 2005

d) 2015

15. What was the original name of the language before it was renamed to Java?

a) Oak

b) Pine

c) Maple

d) Cedar

16. What is the slogan that highlights Java's platform independence?

a) Write Once, Run Anywhere (WORA)

b) Code Once, Execute Anywhere (COEA)

c) Compile Once, Deploy Anywhere (CODA)

d) Execute Once, Deploy Anywhere (EODA)

17. What component is required to execute Java bytecode on a specific platform?

a) Java Compiler

b) Java Development Kit (JDK)

c) Java Virtual Machine (JVM)

d) Java Runtime Environment (JRE)

18. What feature of Java allows it to be platform independent?

a) Just In Time (JIT) Compilation

b) Write Once, Run Anywhere (WORA)

c) Direct hardware control

d) High performance optimization

19. Which company acquired Sun Microsystems, taking over the development of Java?

a) IBM

b) Microsoft

c) Oracle Corporation

d) Google

20. What consists of sequences of binary digits (0s and 1s) that directly control the computer's hardware?

a) Assembly language

b) High-level language

c) Machine code

d) Bytecode

21. Which programming language is one step above machine code?

a) High-level language

b) Assembly language

c) Low-level language

d) Scripting language

22. What is a major disadvantage of machine-level programming language?

a) Direct control over hardware

b) Easy readability

c) Highly specific to architecture

d) Portability across platforms

23. Which programming language provides more human-readable representation of computer instructions using mnemonics and symbols?

a) Machine code

b) Assembly language

c) Low-level language

d) High-level language

24. Which type of programming language is closer to hardware compared to high-level languages?

a) High-level language

b) Machine code

c) Low-level language

d) Assembly language

25. What do low-level programming languages like assembly use to represent operations and memory addresses?

a) Binary digits

b) Mnemonics and symbols

c) English-like syntax

d) High-level abstractions

26. Which type of language offers higher-level abstractions while still allowing direct access to system resources?

a) High-level language

b) Machine code

c) Mid-level language

d) Low-level language

27. Which language is known for its use of mnemonics like MOV for move and ADD for addition?

a) Java

b) Python

c) x86 Assembly

d) COBOL

28. Which type of programming languages are designed to be more abstract and user-friendly?

a) High-level language

b) Low-level language

c) Machine code

d) Assembly language

29. What is a key advantage of high-level programming languages?

a) Direct control over hardware

b) Portability across platforms

c) Closer to machine code

d) Efficient use of system resources

30. Which language introduced structured programming concepts like loops and blocks?

a) Fortran

b) COBOL

c) ALGOL

d) LISP

31. What is one of the characteristics of COBOL programming language?

a) Readability and English-like syntax

b) Designed for artificial intelligence research

c) Known for its use in scientific computing

d) Supports dynamic typing

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38. Which company acquired Sun Microsystems, taking over the development of Java?

a) IBM

b) Microsoft

c) Oracle Corporation

d) Google

39. What was the original purpose of the "Green Project" initiated by Sun Microsystems?

a) To develop a programming language for interactive television

b) To create a new operating system

c) To design a graphics processing unit

d) To develop a mobile application platform

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d) High-level language

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b) Direct control over hardware

c) Easy readability

d) High-level abstraction

42. What is a disadvantage of machine-level programming language?

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b) Tied to specific hardware architecture

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