1. **Which of the following is used to give instructions to a computer?**
   a. Hardware
   b. Software
   c. Program/Code
   d. Database
   (Answer: c)
2. **Which programming language is commonly used for web development?**
   a. HTML
   b. Java
   c. Python
   d. All of the above
   (Answer: d)
3. **What does "bug" mean in programming?**
   a. A computer virus
   b. A mistake or error in code
   c. A type of software
   d. A system update
   (Answer: b)
4. **Which symbol is used to end a statement in Java?**
   a. , (comma)
   b. . (period)
   c. ; (semicolon)
   d. : (colon)
   (Answer: c)
5. **What does IDE stand for in programming?**
   a. Internal Design Editor
   b. Integrated Development Environment
   c. Internet Data Exchange
   d. Interactive Debugging Engine
   (Answer: b)
6. **In coding, what does "loop" mean?**
   a. Repeating a set of instructions
   b. Storing data in memory
   c. Combining two programs
   d. Fixing an error
   (Answer: a)

7. **Which of the following is NOT a programming language?**
   a. Python
   b. Java
   c. Photoshop
   d. C++
   (Answer: c)

8. **What is the first step in solving a programming problem**?
   a. Debugging
   b. Writing the code immediately
   c. Planning and understanding the problem
   d. Compiling the program
   (Answer: c)

9. **Which of these is used to store multiple values in programming**?
   a. Loop
   b. Array
   c. Variable
   d. Function
   (Answer: b)

10. **Which of the following jobs is most related to software development?**
    a. Animator
    b. Game Developer
    c. Photographer
    d. Video Editor
    (Answer: b)

11. **Which programming language is often used for Artificial Intelligence and Data Science?**
    a. C
    b. Java
    c. Python
    d. HTML
    (Answer: c)

12. **What does GUI stand for?**
    a. General User Instruction
    b. Graphical User Interface
    c. Global Utility Input
    d. Generated Utility Interaction
    (Answer: b)

13. **Which of the following is used to manage and store data in software applications?**
    a. Algorithm
    b. Database
    c. Flowchart
    d. Compiler
    (Answer: b)

14. **In HTML, which tag is used to display the largest heading?**
    a. <h6>
    b. <h1>
    c. <head>
    d. <title>
    (Answer: b)

15. **Which of these is an open-source operating system often used by developers?**
    a. Windows
    b. Linux
    c. macOS
    d. Android
    (Answer: b)

16. **What does an algorithm represent?**
    a. A step-by-step solution to a problem
    b. A debugging tool
    c. A computer virus
    d. A type of database
    (Answer: a)

17. **Which software development model is known for step-by-step phases (planning, design, coding, testing)?**
    a. Agile
    b. Waterfall
    c. Spiral
    d. Prototype
    (Answer: b)

18. **Which type of loop will always run at least once in most programming languages**?
    a. For loop
    b. While loop
    c. Do-while loop
    d. Nested loop
    (Answer: c)

19. **Which profession is responsible for testing software to ensure it works correctly?**
    a. Software Tester
    b. Graphic Designer
    c. Animator
    d. Editor
    (Answer: a)

20. **What does API stand for in software development**?
    a. Application Programming Interface
    b. Advanced Program Instruction
    c. Algorithm Processing Input
    d. Automated Program Index
    (Answer: a)