Unit 1 MCQ

1. **What is a programming language?**
    a. A programming language is a notational system for describing computation in a machine-readable and human-readable form
    b. A programming language is a tool for developing executable models for a class of problem domains
    **c. Both a and b**
    d. None of the above
2. **Reasons for Studying Concepts of Programming Languages**
    a. Increased ability to express ideas
    b. Improved background for choosing appropriate languages
    c. Increased ability to learn new languages
    **d. All of the above**
3. **Language used for Business processing**
    **a. COBOL**
    b. JAVA
    c. FORTRAN
    d. BASIC
4. Artificial intelligence languages is/are
    a. LISP
    b. Prolog
    c. Both a and b
    d. Only B
5. What is a programming paradigm?
    a. Steps of solving a problem
    b. Steps to programming
    c. Steps to a programming language
    **d. Both a method of problem solving and an approach to programming language design**
6. A programming paradigm includes
    a. Problem solving
    b. Program language design
    **c. Problem solving and program language design**
    d. None of the above
7. The following are programming paradigms:
    a. Procedural, object-imperative, scripting, declaring, functional, aspect-oriented
    b. High Level Language, Low Level Language
    c. Java, C++, Pascal
    **d. Procedural, object-oriented , Logic**
8. This paradigm tells how to do something rather than what to do:
    a. object-oriented
    **b. procedural**
    c. scripting

d. functional

9. Conventional languages based on the Von Neumann computation model are often called
   a. **imperative languages**
   b. iterative languages
   c. state-less languages
   d. oop language
10. A factor in the selection of a source language is
   a. programmer skill
   b. language availability
   c. program compatibility with other software
   d. all of the above
11. Which of the following is not a quality of a programming language?
   a. Efficiency
   b. Reliability
   c. Readability
   d. **Easy**
12. Language reliability is combination of which of the following quality?
   a. Writability
   b. Readability
   c. Safety
   d. **All of the above**
13. A programming language is a formal notation for describing..... for execution by computer
   a. Program
   b. **Algorithms**
   c. Data
   d. Problem
14. Syntax is described by..... that define the form of a language
   a. **a set of rules**
   b. keywords
   c. semantics

d. program

15. syntactic and lexical rules are used to define ..... of the language
    a. internal appearance
    **b. external appearance**
    c. statements syntax
    d. compiler
16. Static binding is at____
    a. Translation time
    b. Language implementation time
    c. Language definition time
    **d. All of the above**
17. Which was the first high level language developed for business purpose
    a. ALGOL 60
    b. LISP
    **c. COBOL**
    d. FORTRAN
18. Which language needs heap allocation in the run time environment
    a. Those that support recursion
    b. Those that use dynamic scoping
    **c. Those that allow dynamic data structures**
    d. Those that use global variables
19. Which of the following is the advantage of declarative languages over imperative languages?
    a. Can use abstract data type;
    **b. Easy to verify the properties of the program**
    c. Can be implemented by an interpreter or compiler
    d. Is more efficient
20. The method of compilation in which compilation unit can be compiled at different times, but their compilations are not independent of each other if either accesses or uses any entities of the other IS KNOWN AS.....
    **a. Separate compilation**
    b. Independent compilation
    c. both A and B
    d. None of the above
21. With ....., program units can be compiled without information about any other program units.
    a. Separate compilation
    **b. Independent compilation**
    c. both A and B
    d. None of the above
22. Which of the following is most oriented to scientific programming
    **a. FORTRAN**

b. COBOL
c. BASIC
d. PL/1

23. Dynamic binding takes place during
    a. Compilation
    b. Linking
    c. Loading the program
    **d. Execution**
24. What is the scope of an external variable?
    a. Whole source file in which it is defined
    b. From the point of declaration to the end of the file in which it is defined
    c. Any source file in a program
    **d. From the point of declaration to the end of the file being compiled**
25. What is the scope of a function?
    a. Whole source file in which it is defined
    b. From the point of declaration to the end of the file in which it is defined
    c. Any source file in a program
    **d. From the point of declaration to the end of the file being compile**
26. Scope of variable is related to definition of variable as:
    1. Region of code within which variable value is valid and hence can be accessed.
    2. No, relation with region where variable is declared its value is valid in entire scope.
    **a. 1**
    b. 2
    c. Both 1 and 2
    d. None
27. Variable which uses same name in whole program and in its all routines thus best classified as
    a. Middle variable
    **b. Global Variable**
    c. Local Variable
    d. Default Varaible
28. Programming languages may enforce a certain programming style is called as ___
    a. Programming language style
    b. Software development cycle
    **c. programming paradigm**
    d. None of these
29. Languages enforcing a specific programming paradigm can be called
    a. Programming language style
    b. Software development cycle
    **c. paradigm-oriented**
    d. All of these
30. Conventional languages based on the Von Neumann computation model are called as
    **a. Imperative languages**

b. Declarative languages
c. Computational languages
d. All of these