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# MULTIPLE CHOICE QUESTIONS ( MCQ's )

For Online Examination (Phase I & II - 50 Marks)

## PRINCIPLES OF PROGRAMMING LANGUAGES

Second Year Degree Course In  
COMPUTER ENGINEERING (Sem - II)

### Includes

- Sample Ques. Papers for Online Exams (50 Marks)

Mrs. P. P. JORVEKAR  
Mrs. S. N. BHOSALE  
Mr. S. P. GODSE

A BOOK OF

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SECOND YEAR DEGREE COURSE IN COMPUTER ENGINEERING

Strictly According to New Revised Credit System Syllabus  
of Savitribai Phule Pune University

(w.e.f June 2016)

**Mrs. PRITI P. JORVEKAR - KUMBHAR**

ME. (Comp. Engg.)  
Assistant Professor,  
Comp. Engg. Deptt.,  
NBN Sinhgad School of Engineering,  
Ambegaon (Bk.), PUNE.

**Mrs. SHILPA N. BHOSALE**

ME. (Comp. Engg.)  
Assistant Professor,  
Comp. Engg. Deptt.,  
NBN Sinhgad School of Engineering,  
Ambegaon (Bk.), PUNE.

**SACHIN P. GODSE**

ME. CSE (IT),  
Assistant Professor,  
Comp. Engg. Deptt.,  
Sinhgad Academy of Engineering,  
Kondhwa (Bk.), PUNE.

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## PRINCIPLES OF PROGRAMMING LANGUAGES (SE COMP.)

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## PROGRAMMING LANGUAGES SYNTAX AND SEMANTICS

### MULTIPLE CHOICE QUESTIONS

1. What is the only language that a computer understands directly?  
(a) English, as spoken in Boston, Mass.  
(b) BASIC, the Beginners' All-purpose Symbolic Instruction Code  
(c) machine language, different for every type of CPU  
**Answer : c**
2. What are the three main *types* of computer programming languages?  
(a) machine language, assembly language, high level language  
(b) imperative language, functional language, declarative language  
(c) COBOL, Fortran-77, C++  
**Answer : a**
3. From the point of view of the programmer what are the major advantages of using a high-level language rather than internal machine code or assembler language?  
(a) Program portability (b) Easy development  
(c) Efficiency  
**Answer : b**
4. Which of the following is the functionality of 'Data Abstraction'?  
(a) Reduce Complexity (b) Binds together code and data  
(c) Parallelism (d) None of the mentioned  
**Answer : a**
5. Which of the following mechanisms is/are provided by Object Oriented Language to implement Object Oriented Model?  
(a) Encapsulation (b) Inheritance  
(c) Polymorphism (d) All of the mentioned  
**Answer : d**
6. Which of the these is the functionality of 'Encapsulation'?  
(a) Binds together code and data  
(b) Using single interface for general class of actions.  
(c) Reduce Complexity  
(d) All of the mentioned  
**Answer : a**

7. What is 'Basis of Encapsulation'?

- (a) object
- (b) class
- (c) method
- (d) all of the mentioned

**Answer : a**

8. How will a class protect the code inside it?

- (a) Using Access specifiers
- (b) Abstraction
- (c) Use of Inheritance
- (d) All of the mentioned

**Answer : a**

9. What is the output of this program?

```
class Test {  
    int a;  
    public int b;  
    private int c;  
}  
class ACESSTest {  
    public static void main(String args[])  
    {  
        Test ob = new Test();  
        ob.a = 10;  
        ob.b = 20;  
        ob.c = 30;  
        System.out.println(" Output :a, b, and c" + ob.a + " " + ob.b + " " + ob.c);  
    }  
}
```

- (a) Compilation error
- (b) Run time error
- (c) Output : a, b and c 10 20 30
- (d) None of the mentioned

**Answer : c**

10. Which of the following is a mechanism by which object acquires the properties of another object?

- (a) Encapsulation
- (b) Abstraction
- (c) Inheritance
- (d) Polymorphism

**Answer : c**

11. Which of the following supports the concept of hierarchical classification?

- (a) Polymorphism
- (b) Encapsulation
- (c) Abstraction
- (d) Inheritance

**Answer : d**

12. Which Keyword from the following is used to inherit properties from one class into another?

- (a) extends
- (b) subclasses
- (c) native
- (d) all of the mentioned

**Answer : a**

13. Which of the following concept is often expressed by the phrase, 'One interface, multiple methods'?

- (a) Abstraction
- (b) Polymorphism
- (c) Inheritance
- (d) Encapsulation

**Answer : b**

14. Data types are differed on basis of

- (a) way of storage
- (b) type of operations
- (c) type of operators used
- (d) both a and b

**Answer : a**

15. Loop statement which is repeated to some given number of times is classified as

- (a) FOR loop
- (b) GO loop
- (c) REPEAT loop
- (d) GO REPEAT loop

**Answer : a**

16. In high-level language Pascal, area is calculated as

- (a) 100 Area = Width\*Length
- (b) 100 Area = Width\*Length
- (c) Area = Width\*Length;
- (d) length 100 : area\*20width

**Answer : c**

17. Type of statement written in sequence and are repeated until conditions met is classified as

- (a) format
- (b) loop
- (c) case
- (d) condition

**Answer : b**

18. Size of an array is declared by

- (a) programmer
- (b) program users
- (c) software
- (d) declared automatically

**Answer : a**

19. An instruction which tells assembler how to deal with whole program is classified as

- (a) direction
- (b) directive
- (c) director
- (d) compiler

**Answer : d**

20. Sequence of instructions that are carried out for a particular task is classified as

- (a) routine
- (b) subroutine
- (c) procedure
- (d) function

**Answer : c**



21. In repeat-until loop 'UNTIL Option>0 and Option<8 AND INT(Option) = Option' , INT function is classified as

- (a) option
- (b) function
- (c) format option
- (d) format function

**Answer : b**

22. A program which interprets each line of high level program at time of execution is called

- (a) instructor
- (b) interpreter
- (c) translator
- (d) executor

**Answer : b**

23. Functions used in programs that are defined by programmers are called

- (a) program layout
- (b) program procedure
- (c) built-in functions
- (d) user-defined function

**Answer : d**

24. An assembler translates

- (a) machine code into assembly code
- (b) assembly code into machine code
- (c) processing time into manual time
- (d) routine into subroutine

**Answer : b**

25. Name given by a programmer to some data is classified as

- (a) identifier
- (b) identification
- (c) exponent
- (d) mantissa

**Answer : a**

26. When variable used in program is whole number, variable is stored as

- (a) fixed string
- (b) integers
- (c) negative whole numbers
- (d) positive whole numbers

**Answer : b**

27. In line "100 INPUT NUM" of a BASIC program, 'INPUT NUM' is

- (a) line statement
- (b) single instruction
- (c) reserved words
- (d) expression

**Answer : b**

28. Set of data whose items are organized together is classified as

- (a) data structure
- (b) variable structure
- (c) string structure
- (d) positive structure

**Answer : a**

29. Comments used to make program easier are also called as

- (a) marked variables
- (b) narrative
- (c) unmarked strings
- (d) unmarked variable

**Answer : b**

30. Programming language which is used for scientific purposes and work is to be done in batches is  
(a) PASCAL      (b) FORTRAN      (c) LOGO      (d) COMAL

**Answer : a**

31. To make program more easier to understand, programmers can  
(a) add comments to it      (b) declare variable names  
(c) use secure data      (d) both a and b

**Answer : a**

32. In line '300 IF NAMEINR="\*\*\*\*" THEN Average= Total Mark/N' of BASIC program, "\*\*\*\*" is classified as  
(a) rational string      (b) string variable  
(c) irrational string      (d) string constant

**Answer : d**

33. In programming, programmers used comments to  
(a) highlight program modules      (b) explain module functions  
(c) explain used variables      (d) all of above

**Answer : d**

34. In line '200 IF NAMEINR="\*\*\*\*" THEN Average= Total Mark/N' of BASIC program, NAMEINR is classified as  
(a) string variable      (b) string constant  
(c) rational string      (d) irrational string

**Answer : a**

35. Variable which uses same name in whole program and in its all routines thus best classified as  
(a) middle variable      (b) default variable  
(c) local variable      (d) global variable

**Answer : d**

36. Statement used to make choice between different options and only option is to be performed is written as  
(a) if then statement      (b) if else statement  
(c) then else statement      (d) else one statement

**Answer : b**

37. In programming language BASIC, statement ends with REM are considered as  
(a) narrative      (b) unmarked strings  
(c) unmarked variable      (d) marked variables

**Answer : a**

38. In high level programming language Pascal, each program statement ends with the
- (a) comma
  - (b) semicolon
  - (c) double quotation marks
  - (d) single quotation marks

**Answer : b**

39. Type of program which can be run on different types of computer by making little changes into it is classified as

- (a) portable program
- (b) fixed program
- (c) standard program
- (d) compiled program

**Answer : a**

40. In unstructured programming language BASIC, program can be divided into the

- (a) different modules
- (b) different arrays
- (c) different dimensions
- (d) different procedures

**Answer : d**

41. When there is range of numbers involved in a program, it can be stored as

- (a) real numbers
- (b) original numbers
- (c) rational numbers
- (d) irrational numbers

**Answer : a**

42. Technique of using fixed words for machine code functions is classified as

- (a) mnemonics
- (b) mechanics
- (c) compiler
- (d) translator

**Answer : a**

43. Type of program which can be run on different types of computer by making little changes into it is classified as

- (a) portable program
- (b) fixed program
- (c) standard program
- (d) compiled program

**Answer : a**

44. Which of the following is not true of FORTRAN?

- (a) it was developed for scientific and mathematical applications
- (b) it is one of the oldest high-level languages
- (c) it is a problem oriented language
- (d) it requires extensive internal documentation
- (e) all of above

**Answer : b**

45. Technique of using fixed words for machine code functions is classified as

- (a) mnemonics
- (b) mechanics
- (c) compiler
- (d) translator

**Answer : a**

46. Overloading the function operator
- (a) requires a class with an overloaded operator.
  - (b) requires a class with an overloaded [ ] operator.
  - (c) allows you to create objects that act syntactically like functions.
  - (d) usually make use of a constructor that takes arguments.

**Answer : a**

47. Main type of functions does not includes
- (a) built-in function
  - (b) top down procedures
  - (c) programmer defined function
  - (d) user-defined function

**Answer : b**

48. Programming language 'BASIC' is used for the
- (a) beginners
  - (b) commercial programs
  - (c) household user interface
  - (d) student applications

**Answer : a**

49. 'object program' is also called
- (a) program code
  - (b) machine code
  - (c) assembler
  - (d) compiler

**Answer : b**

50. When source program is translated it is classified as
- (a) object program
  - (b) featured program
  - (c) detailed program

**Answer : a**

51. In high level programming language, instructions used to supply value in an expression are classified as
- (a) program function
  - (b) program argument
  - (c) program routine
  - (d) program default exponents

**Answer : b**

52. Data structure in which all elements have similar name is considered as
- (a) string structure
  - (b) positive structure
  - (c) array
  - (d) data structure

**Answer : c**

53. Number of subscript which is attached to every element in array is classified as
- (a) number of subscript
  - (b) number of superscripts
  - (c) number of dimensions
  - (d) number of high scripts

**Answer : c**

54. In programming language COBOL, symbol of '/' is used instead of

- (a) unmarked variable
- (b) unmarked strings
- (c) remarks
- (d) marked structure

**Answer : c**

55. COBOL language statement '//PROGRAM : Input three numbers and print average//' shows

- (a) defined function
- (b) entered variables
- (c) string variables
- (d) real numbers

**Answer : c**

56. Program used for interactive computing is

- (a) translator
- (b) executor
- (c) instructor
- (d) interpreter

**Answer : d**

57. In programming language BASIC, area is calculated as

- (a) 100 Area=Width\*Length
- (b) 100 Area : = Width\*Length
- (c) Area : = Width\*Length
- (d) area 100 : length\*width

**Answer : a**

58. First component in algorithms is

- (a) character structure
- (b) repetition
- (c) selection
- (d) sequence

**Answer : d**

59. Loop which is tested at least once in case condition does not fulfilled is classified as

- (a) FOR loop
- (b) GO loop
- (c) REPEAT loop
- (d) REPEAT UNTIL loop

**Answer : d**

60. To perform stream I/O with disk files in C++, you should

- (a) open and close files as in procedural languages.
- (b) use classes derived from ios.
- (c) use C language library functions to read and write data.
- (d) include the IOSTREAM.H header file.

**Answer : b**

61. All numbers including decimals are classified as

- (a) composite numbers
- (b) real numbers
- (c) integers
- (d) prime numbers

**Answer : b**

62. Loop statement used in program to continue repetition until some condition is met is classified as

- (a) GO loop
- (b) REPEAT UNTIL loop
- (c) GO WHILE loop
- (d) WHILE loop

**Answer : b**

63. Group of all special characters such as digits and letters are classified as

- (a) strings
- (b) negative numbers
- (c) odd numbers
- (d) even numbers

**Answer : a**

64. In programming a single instruction is classified as

- (a) set of instructions
- (b) statement
- (c) set of codes
- (d) set of formula

**Answer : b**

65. Program style and must be written in

- (a) well structured manner
- (b) easy modification format
- (c) easily understandable
- (d) all of above

**Answer : d**

66. Usually a pure virtual function

- (a) has complete function body.
- (b) will never be called.
- (c) will be called only to delete an object.
- (d) is defined only in derived class.

**Answer : d**

67. If the variable count exceeds 100, a single statement that prints "Too many" is

- (a) if (count < < "Too many";
- (b) if (count > 100) cout > > "Too many";
- (c) if (count > 100) cout < < "Too many";
- (d) None of these.

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**Answer : c**

68. In programming language, 'identifier' can be

- (a) variable
- (b) constant
- (c) array
- (d) all of above

**Answer : d**

69. Type of subroutines which are available to users of computer as default part of software is classified as

- (a) default routine
- (b) library subroutine
- (c) default subroutine
- (d) local subroutine

**Answer : b**

70. Translation of assembly language into machine code is a task of

- (a) assembler
- (b) programmer
- (c) analysts
- (d) financier

**Answer : a**

71. Loop which does not executed at all if it is tested at beginning is classified as

- (a) REPEAT loop
- (b) GO REPEAT loop
- (c) WHILE loop
- (d) DO loop

**Answer : c**

72. Special character symbol '/' is used to indicate

- (a) director
- (b) direction arrows
- (c) direction
- (d) directive

**Answer : d**

73. Rogue value in statement "140 PRINT "For each one type in name. Type '\*\*\*,0,0' to finish" is

- (a) asterisk
- (b) print command
- (c) numerical values
- (d) alphabetic statement

**Answer : a**

74. Compiler is used when data is to be processed in

- (a) whole at one time
- (b) one line in one minute
- (c) four pages in five minutes
- (d) batches

**Answer : d**

75. Examples of program routine are

- (a) complete short program
- (b) part of a program
- (c) set of instructions used
- (d) all of above

**Answer : d**

76. One or more numbers which helps distinguish elements in array is classified as

- (a) superscript
- (b) subscript
- (c) low script
- (d) high script

**Answer : b**

77. A name which has some special meaning and significance for programmer is called

- (a) reserved words
- (b) changing words
- (c) files
- (d) data array

**Answer : a**

78. Items of data help making its structure is classified as

- (a) variable structure
- (b) elements
- (c) data structure
- (d) string structure

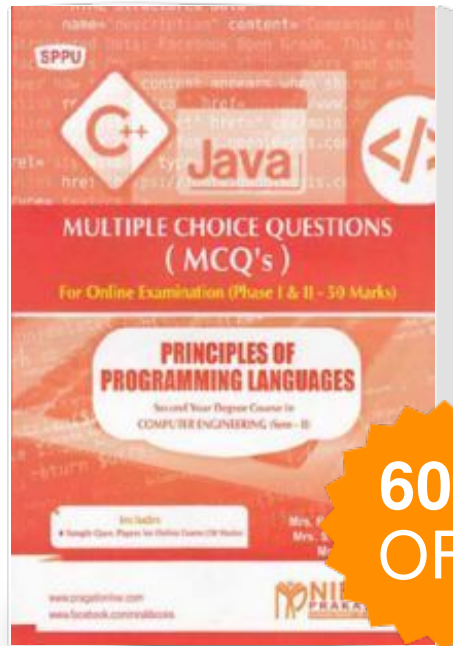
**Answer : b**

79. A special value placed at end of items data list is called

- (a) vague values
- (b) numerical values
- (c) rogue value
- (d) decimal values

**Answer : c**

# Principles Of Programming Languages



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