UNIT 1 : Introduction to C Language

1. Which of the following is not a valid variable name declaration?
a) int __a3;
b) int __3a;
c) int __A3;
d) None of the mentioned

Answer: d

2. Which of the following is not a valid variable name declaration?
a) int _a3;
b) int a_3;
c) int 3_a;
d) int _3a

Answer: c

3. Why do variable names beginning with the underscore is not encouraged?
a) It is not standardized
b) To avoid conflicts since assemblers and loaders use such names
c) To avoid conflicts since library routines use such names
d) To avoid conflicts with environment variables of an operating system

Answer: c

4. All keywords in C are in _____
a) LowerCase letters
b) UpperCase letters
c) CamelCase letters
d) None of the mentioned

Answer: a

5. Variable name resolution (number of significant characters for the uniqueness of variable) depends on _____
a) Compiler and linker implementations
b) Assemblers and loaders implementations
c) C language
d) None of the mentioned

Answer: a

6. Which of the following is not a valid C variable name?
a) int number;
b) float rate;
c) intvariable_count;
d) int $main;

Answer: d

7. Which of the following is true for variable names in C?
a) They can contain alphanumeric characters as well as special characters
b) It is not an error to declare a variable to be one of the keywords(like goto, static)
c) Variable names cannot start with a digit
d) Variable can be of any length

Answer: c

8. What is short int in C programming?
a) The basic data type of C
b) Qualifier
c) Short is the qualifier and int is the basic data type
d) All of the mentioned

Answer: c

9. The format identifier '%i' is also used for _____ data type.
a) char
b) int
c) float
d) double

Answer: b

10. Which data type is most suitable for storing a number 65000 in a 32-bit system?
a) signed short
b) unsigned short
c) long
d) int

Answer: b

11. Which of the following is a User-defined data type?
a) typedefint Boolean;

b) typedefenum {Mon, Tue, Wed, Thu, Fri} Workdays;
c) struct {char name[10], int age};
d) all of the mentioned

Answer: d

12. What is the size of an int data type?
a) 4 Bytes
b) 8 Bytes
c) Depends on the system/compiler
d) Cannot be determined

Answer: c

13. enum types are processed by _____
a) Compiler
b) Preprocessor
c) Linker
d) Assembler

Answer: a

14. Which of the following statement is false?
a) Constant variables need not be defined as they are declared and can be defined later
b) Global constant variables are initialized to zero
c) const keyword is used to define constant values
d) You cannot reassign a value to a constant variable

Answer: a

15. Which of the following declaration is not supported by C?
a) String str;
b) char *str;
c) float str = 3e2;
d) Both String str; & float str = 3e2;

Answer: a

16. Which of the following declaration is illegal?
a) char *str = “Best C programming classes by Sanfoundry”;
b) char str[] = “Best C programming classes by Sanfoundry”;
c) char str[20] = “Best C programming classes by Sanfoundry”;
d) char[] str = “Best C programming classes by Sanfoundry”;

Answer: d

17. Which keyword is used to prevent any changes in the variable within a C program?
a) immutable
b) mutable
c) const
d) volatile

Answer: c

18. Which of the following is not a pointer declaration?
a) char a[10];
b) char a[] = {'1', '2', '3', '4'};
c) char *str;
d) char a;

Answer: d

19. Which of the following statement is false?
a) A variable defined once can be defined again with different scope
b) A single variable cannot be defined with two different types in the same scope
c) A variable must be declared and defined at the same time
d) A variable refers to a location in memory

Answer: c

20. A variable declared in a function can be used in main().
a) True
b) False
c) True if it is declared static
d) None of the mentioned

Answer: b

21. What is the precedence of arithmetic operators (from highest to lowest)?
a) %, *, /, +, –
b) %, +, /, *, –
c) +, -, %, *, /
d) %, +, -, *, /

Answer: a

22. Which of the following is not an arithmetic operation?
a) a * = 10;

b) a / = 10;
c) a ! = 10;
d) a % = 10;

Answer: c

23. Which of the following data type will throw an error on modulus operation(%)?
a) char
b) short
c) int
d) float

Answer: d

24. Which among the following are the fundamental arithmetic operators, i.e, performing the desired operation can be done using that operator only?
a) +, –
b) +, -, %
c) +, -, *, /
d) +, -, *, /, %

Answer: a

25. Are logical operator sequence points?
a) True
b) False
c) Depends on the compiler
d) Depends on the standard

Answer: a

26. Do logical operators in the C language are evaluated with the short circuit?
a) True
b) False
c) Depends on the compiler
d) Depends on the standard

Answer: a

27. What is the result of logical or relational expression in C?
a) True or False
b) 0 or 1
c) 0 if an expression is false and any positive number if an expression is true

d) None of the mentioned

Answer: b

28. Relational operators cannot be used on _____
a) structure
b) long
c) strings
d) float

Answer: a

29. Which among the following is NOT a logical or relational operator?
a) !=
b) ==
c) ||
d) =

Answer: d

30. What is the type of the following assignment expression if x is of type float and y is of type int?
y = x + y;
a) int
b) float
c) there is no type for an assignment expression
d) double

Answer: a

31. What will be the value of the following assignment expression?
(x = foo())!= 1 considering foo() returns 2
a) 2
b) True
c) 1
d) 0

Answer: a

32. Operation “a = a * b + a” can also be written as _____
a) a *= b + 1;
b) (c = a * b)!=(a = c + a);
c) a = (b + 1)* a;
d) All of the mentioned

Answer: d

33. What will be the final value of c in the following C statement? (Initial value: c = 2)c <<= 1;
a) c = 1;
b) c = 2;
c) c = 3;
d) c = 4;

Answer: d

34. In expression i = g() + f(), first function called depends on _____
a) Compiler
b) Associativiy of () operator
c) Precedence of () and + operator
d) Left to write of the expression

Answer: a

35. Which operators of the following have same precedence?P. "!=", Q. "+=", R. "<<="
a) P and Q
b) Q and R
c) P and R
d) P, Q and R

Answer: b

36. Comment on the following statement n = 1;printf("%d, %dn", 3*n, n++);
a) Output will be 3, 2
b) Output will be 3, 1
c) Output will be 6, 1
d) Output is compiler dependent

Answer: d

37. Which is correct representation of C statement?e = a * b + c / d * f;
a) e = (a * (b +(c /(d * f))));
b) e = ((a * b) + (c / (d * f)));
c) e = ((a * b) + ((c / d)* f));
d) Both e = ((a * b) + (c / (d * f))); and e = ((a * b) + ((c / d)* f));

Answer: d

38. While swapping 2 no' what at precautions to be taken care?b = (b / a); a = a * b;b = a / b;

a) Data type should be either of short, int and long
b) Data type should be either of float and double
c) All data types are accepted except for (char *)
d) This code doesn't swap 2 numbers

Answer: b

39. function tolower(c) defined in library <ctype.h> works for _____
a) Ascii character set
b) Unicode character set
c) Ascii and utf-8 but not EBCDIC character set
d) Any character set
View Answer

Answer: d

40. Which type of conversion is NOT accepted?
a) From char to int
b) From float to char pointer
c) From negative int to char
d) From double to char
View Answer

Answer: b

41. Which of the following type-casting have chances for wrap around?
a) From int to float
b) Fromint to char
c) From char to short
d) From char to int
View Answer

Answer: b
Explanation: None.

42. Which of the following typecasting is accepted by C?
a) Widening conversions
b) Narrowing conversions
c) Widening & Narrowing conversions
d) None of the mentioned
View Answer

Answer: c
Explanation: None.

43. When do you need to use type-conversions?
a) The value to be stored is beyond the max limit
b) The value to be stored is in a form not supported by that data type
c) To reduce the memory in use, relevant to the value
d) All of the mentioned
View Answer

Answer: d

44. 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
View Answer

Answer: d
Explanation: None.

45. 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 compiled
View Answer

Answer: d

46 In the standard library of C programming language, which of the following header file is designed for basic mathematical operations?

a) math.h
b) conio.h
c) dos.h
d) stdio.h

Answer: a

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a) Constant expressions are evaluated at compile
b) String constants can be concatenated at compile time
c) Size of array should be known at compile time
d) All of these

Option: d

48.Which of the following statements should be used to obtain a remainder after dividing 3.14 by 2.1 ?

a) rem = 3.14 % 2.1;
b) rem = modf(3.14, 2.1);
c) rem = fmod(3.14, 2.1);
d) Remainder cannot be obtain in floating point division.

Answer: Option c

49.Which of the following special symbol allowed in a variable name?

a) * (asterisk)
b) | (pipeline)
c) - (hyphen)
d) _ (underscore)

Answer: Option d

50.By default a real number is treated as a

a) A.float
b) B.double
c) C.long double
d) D. far double

Answer: Option b

UNIT 2 : Managing I/O Operations

1. Which among the following is the odd one out?
a) printf
b) fprintf
c) putchar
d) scanf
Answer: d

2. For a typical program, the input is taken using _____
a) scanf
b) Files
c) Command-line
d) All of the mentioned
Answer: d

3. What does the following command line signify?prog1|prog2

a) It runs prog1 first, prog2 second
b) It runs prog2 first, prog1 second
c) It runs both the programs, pipes output of prog1 to input of prog2
d) It runs both the programs, pipes output of prog2 to input of prog1
Answer: c.

4. What is the default return-type of getchar()?
a) char
b) int
c) char *
d) reading character doesn't require a return-type
Answer: b

5. What is the value of EOF?
a) -1
b) 0
c) 1
d) 10
Answer: a

6. What is the use of getchar()?
a) The next input character each time it is called
b) EOF when it encounters end of file
c) The next input character each time it is called EOF when it encounters end of file

d) None of the mentioned
Answer: c

7. Which of the following statement is true?
a) The symbolic constant EOF is defined in <stdio.h>
b) The value is -1
c) The symbolic constant EOF is defined in <stdio.h>& value is -1
d) Only value is -1
Answer: c

8. What is the return value of putchar()?
a) The character written
b) EOF if an error occurs
c) Nothing
d) Both character written & EOF if an error occurs
Answer: d

9. Escape sequences are prefixed with _____
a) %
b) /
c) ”
d) None of the mentioned
Answer: d

10. What is the purpose of sprintf?
a) It prints the data into stdout
b) It writes the formatted data into a string
c) It writes the formatted data into a file
d) None of the mentioned
Answer: b.

11. The syntax to print a % using printf statement can be done by _____
a) %
b) \%
c) ‘%’
d) %%
Answer: d

12. What are the Properties of the first argument of a printf() functions?
a) It is defined by a user
b) It keeps the record of the types of arguments that will follow
c) There may no be first argument
d) None of the mentioned

Answer: b

13. What is the difference between %e and %g?
a) %e output formatting depends on the argument and %g always formats in the format [-]m.dddddd or [-]m.ddddd[+|-]xx where no.of ds are optional
b) %e always formats in the format [-]m.dddddd or [-]m.ddddd[+|-]xx where no.of ds are optional and output formatting depends on the argument
c) No differences
d) Depends on the standard
Answer: b

14. Which of the following function with ellipsis are illegal?
a) void func(…);
b) void func(int, …);
c) void func(int, int, …);
d) none of the mentioned
Answer: a.

15. Which of the following data-types are promoted when used as a parameter for an ellipsis?
a) char
b) short
c) int
d) none of the mentioned
Answer: a

16. Which header file includes a function for variable number of arguments?
a) stdlib.h
b) stdarg.h
c) ctype.h
d) both stdlib.h and stdarg.h
Answer: a

17. Which of the following macro extracts an argument from the variable argument list (ie ellipsis) and advance the pointer to the next argument?
a) va_list
b) va_arg
c) va_end
d) va_start
Answer: b

18. The type va_list in an argument list is used _____
a) To declare a variable that will refer to each argument in turn;
b) For cleanup
c) To create a list

d) There is no such type
Answer: a

19. In a variable length argument function, the declaration "…" can _____
a) Appear anywhere in the function declaration
b) Only appear at the end of an argument list
c) Nothing
d) None of the mentioned
Answer: b

20. Each call of va_arg _____
a) Returns one argument
b) Steps va_list variable to the next
c) Returns one argument & Steps va_list variable to the next
d) None of the mentioned
Answer: c

21. The standard header _____ is used for variable list arguments (…) in C.
a) <stdio.h>
b) <stdlib.h>
c) <math.h>
d) <stdarg.h>
Answer: d

22. What is the purpose of va_end?
a) Cleanup is necessary
b) Must be called before the program returns
c) Cleanup is necessary & Must be called before the program returns
d) None of the mentioned
Answer: c

23. Which of the following is NOT a delimiter for an input in scanf?
a) Enter
b) Space
c) Tab
d) None of the mentioned
Answer: d

24. If the conversion characters of int d, i, o, u and x are preceded by h, it indicates?
a) A pointer to int
b) A pointer to short
c) A pointer to long
d) A pointer to char
Answer: b

25. Which of the following doesn't require an & for the input in scanf()?
a) char name[10];
b) int name[10];
c) float name[10];
d) all of the mentioned
Answer: a

26. Which of the following is an invalid method for input?
a) scanf("%d%d%d",&a, &b, &c);
b) scanf("%d %d %d", &a, &b, &c);
c) scanf("Three values are %d %d %d",&a,&b,&c);
d) none of the mentioned
Answer: d

27. Which of the following represents the function for scanf()?
a) void scanf(char *format, …)
b) intscanf(char *format, …)
c) char scanf(int format, …)
d) char *scanf(char *format, …)
Answer: b

28. What does scanf() function return?
a) Number of successfully matched and assigned input items
b) Nothing
c) Number of characters properly printed
d) Error
Answer: a

29. The conversion characters d, i, o, u, and x may be preceded by h in scanf() to indicate?
a) A pointer to short
b) A pointer to long
c) Nothing
d) Error
Answer: a

30. The syntax of printf() function is printf("control string", variable list) ;what is the prototype of the control string?
a) %[flags][.precision][width][length]specifier
b) %[flags][length][width][.precision]specifier
c) %[flags][width][.precision][length]specifier
d) %[flags][.precision][length][width]specifier
Answer: c

31. The parameter control string in the printf () is a C String that contains text to be _____
a) taken from a standard output device
b) written on to the standard output device
c) received from the standard output device
d) nothing can be said
Answer: b

32. Output justification such as decimal point, numerical sign, trailing zeros or octal are specified.
a) specifier
b) flags
c) precision
d) decimal
Answer: b

33. What symbol is used to Left-justify within the data given field width?
a) -(minus sign)
b) +(plus sign)
c) #
d) 0
Answer: a

34. What specifies the minimum number of characters to print after being padded with zeros or blank spaces?
a) flags
b) length
c) width
d) precision
Answer: c

35. The maximum number of characters to be printed is specified by _____
a) precision
b) width
c) length
d) flags
Answer: a

36. _____is used to define the type and the interpretation of the value of the corresponding argument.
a) precision
b) specifiers
c) flags
d) decimal
Answer: b

37. A conversion specification %7.4f means _____
a) print a floating point value of maximum 7 digits where 4 digits are allotted for the digits after the decimal point

b) print a floating point value of maximum 4 digits where 7digits are allotted for the digits after the decimal point
c) print a floating point value of maximum 7 digits
d) print a floating point value of minimum 7 digits where 4 digits are allotted for the digits after the decimal point
Answer: a

38. Choose the correct description for control string %-+7.2f.
a) – means display the sign, + means left justify, 7 specifies the width and 2 specifies the precision
b) – means left justify, + means display the sign, 7 specifies the width and 2 specifies the precision
c) – means display the sign, + means left justify, 7 specifies the precision and 2 specifies the width
d) – means left justify, + means display the sign, 7 specifies the precision and 2 specifies the width
Answer: b

39. What error is generated on placing an address operator with a variable in the printf statement?
a) compile error
b) run-time error
c) logical error
d) no error
Answer: b

40. If by mistake you specify more number of arguments, the excess arguments will _____
a) be ignored
b) produce compile error
c) produce run-time error
d) produce logical error
Answer: a

41. What happens when zero flag is used with left justification?
a) data is padded with zeros
b) zero flag is ignored
c) data is padded with blank spaces
d) will give error
Answer: b

42. For floating point numbers, the precision flag specifies the number of decimal places to be printed. When no precision modifier is specified, printf() prints _____
a) six decimal positions
b) five decimal positions
c) four decimal positions
d) three decimal positions
Answer: a

43. What will the given code result in printf(“\n you are\”awesome \" ");?
a) compile error
b) run-time error

c) you are "awesome"
d) you are awesome
Answer: c

44. What will be the output for the given code printf("\n The number is %07d",1212);
a) The number is 0001212
b) The number is 1212
c) The number is 1212
d) The number is 1212000
Answer: a

45. The syntax of the scanf() is scanf("control string ", arg1,arg2,arg3,….,argn); the prototype of control string is _____
a) [=%[width][modifiers]type=]
b) [=%[modifiers][width]type=]
c) [=%[width] [modifiers]]
d) [width][modifiers]
Answer: a

46. What is the use of symbol * in the control string as shown [=%[*][width] [modifiers] type=]?
a) * is optional and used when the data should be read from the stream but ignored
b) * is not optional, used to read data from the stream but it is not ignored
c) * is not optional, it is used to read data stream but ignored
d) * is optional and used to read data from stream but it is not ignored
Answer: a

47. What action is carried out by scanf if a user enters any blank spaces, tabs, and newlines?
a) consider as input
b) ignores it
c) produces error
d) nothing can be said
Answer: b

48. What error will generate if the read and write parameters are not separated by commas?
a) run-time error
b) compile error
c) logical error
d) no error
Answer: b

49. _____ is an optional argument that gives the maximum number of characters to be read.
a) modifiers
b) width
c) precision

d) length
Answer: b

50. Explain the format string "%5d%s %c"
a) five characters as a decimal integer, then reads the remaining as a string and then scans the first non-whitespace character
b) compile error
c) run-time error
d) read first five characters as a decimal and ignore the rest
Answer: a

51. Select the correct value of i from given options i=scanf("%d %d", &a, &b);
a) 1
b) 2
c) 3
d) No value assigned
Answer: b

52. Select the correct value of i from given options i=scanf("%d %d", &a, &b);
a) 1
b) 2
c) 3
d) No value assigned
Answer: b

53. If the user enters 1 3.2 s, what value will be returned by the scanf()?scanf("%d %f %c", &s1, &s2, &s3);
a) 1
b) 2
c) 3
d) No return value
Answer: c

54. If the user enters 1 s 3.2, what value will be returned by the scanf()?scanf("%d %f %c", &a, &b, &c);
a) 1
b) 2
c) 3
d) no return value
Answer: a

55. What error will be generated on using incorrect specifier for the datatype being read?
a) compile error
b) run-time error
c) logical error
d) no error

Answer: b

56. What is the prototype of scanf function?
a) scanf("controlstring",arg1,arg2,arg3,….,argn);
b) scanf("control string", variable list);
c) scanf(" varible list,", control string);
d) scanf("arg1,arg2,arg3,….,argn", control string);
Answer: a

57. What is the meaning of the following C statement?scanf("%[^\n]s", ch);
a) read all character except new line
b) read all characters
c) read only new line character
d) syntax error
Answer: a

58. What is the qualifying input for the type specifier G?
a) floating point numbers
b) floating point numbers in exponential format
c) floating point numbers in the shorter of exponential format
d) not a type specifier
Answer: c

59. scanf() is a predefined function in_____header file.
a) stdlib. h
b) ctype. h
c) stdio. h
d) stdarg. h
Answer: c

60. What does the C statement given below says?scanf("%7s",ch);
a) read string with minimum 7 characters.
b) read string with maximum 7 characters
c) read string exactly to 7 characters
d) read string with any number of characters
Answer: b

Unit 3 : Decision Making and looping

1. Which of the following is an invalid if-else statement?
a) if (if (a == 1)){}
b) if (func1 (a)){}
c) if (a){}
d) if ((char) a){}
View Answer
Answer: a

2. Which datatype can accept the switch statement?
a) int
b) char
c) long
d) all of the mentioned
View Answer
Answer: d

3. The C code 'for(;;)' represents an infinite loop. It can be terminated by _____
a) break
b) exit(0)
c) abort()
d) terminate
View Answer
Answer: a

4. Which for loop has range of similar indexes of 'i' used in for (i = 0;i < n; i++)?
a) for (i = n; i>0; i–)
b) for (i = n; i >= 0; i–)
c) for (i = n-1; i>0; i–)
d) for (i = n-1; i>-1; i–)
View Answer
Answer: d
Explanation: None.

5. Which of the following cannot be used as LHS of the expression in for (exp1;exp2; exp3)?
a) variable
b) function
c) typedef
d) macros
View Answer
Answer: d

6. What is an example of iteration in C?
a) for
b) while

c) do-while
d) all of the mentioned
View Answer
Answer: d

7. Which loop is most suitable to first perform the operation and then test the condition?
a) for loop
b) while loop
c) do-while loop
d) none of the mentioned
View Answer
Answer: c

8. Which keyword can be used for coming out of recursion?
a) break
b) return
c) exit
d) both break and return
View Answer
Answer: b

9. The keyword 'break' cannot be simply used within _____
a) do-while
b) if-else
c) for
d) while
View Answer
Answer: b
Explanation: None.

10. Which keyword is used to come out of a loop only for that iteration?
a) break
b) continue
c) return
d) none of the mentioned
View Answer
Answer: b

11. goto can be used to jump from main() to within a function.
a) true
b) false
c) depends
d) varies
View Answer
Answer: b

12. Choose a right C Statement.

a) Loops or Repetition block executes a group of statements repeatedly.
b) Loop is usually executed as long as a condition is met.
c) Loops usually take advantage of Loop Counter
d) All the above.
Answer d

13) Loops in C Language are implemented using.?
a) While Block
b) For Block
c) Do While Block
d) All the above
Answer d

14) Which loop is faster in C Language, for, while or Do While.?
a) for
b) while
c) do while
d) All work at same speed
Answer d

15) What is the way to suddenly come out of or Quit any Loop in C Language.?
a) continue; statement
b) break; statement
c) leave; statement
d) quit; statement
Answer b

16) Choose facts about continue; statement is C Language.
a) continue; is used to take the execution control to next iteration or sequence
b) continue; statement causes the statements below it to skip for execution
c) continue; is usually accompanied by IF statement.
d) All the above.
Answer d

17) Choose a correct statement about C break; statement.?
a) break; statement can be used inside switch block
b) break; statement can be used with loops like for, while and do while.
c) break; statement causes only the same or inner loop where break; is present to quit suddenly.
d) All the above.
Answer d

18) Choose a correct statement about C language break; statement.
a) A single break; statement can force execution control to come out of only one loop.
b) A single break; statement can force execution control to come out of a maximum of two nested loops.

c) A single break; statement can force execution control to come out of a maximum of three nested loops.
d) None of the above.
Answer a

19) Choose a correct C Statement regarding for loop.for(; ;);
a) for loop works exactly first time
b) for loop works infinite number of times
c) Compiler error
d) None of the above
Answer b

20) What are C ASCII character ranges.?
a) A to Z = 65 to 91
b) a to z = 97 to 122
c) 0 to 9 = 48 to 57
d) All the above
Answer d

21) Expand or Abbreviate ASCII with regard to C Language.
a) Australian Standard Code for Information Interchange
b) American Standard Code for Information Interchange
c) American Symbolic Code for Information Interchange
d) Australian Symbolic Code for Information Interchange
Answer b

22) Choose a correct statement about a C Switch Construct.
a) default case is optional inside switch.
b) break; causes the control to exit the switch immediately and avoid fall down to other CASE statements.
c) You can not use duplicate CASE Constants inside a Switch construct.
d) All the above.
Answer d

23) Choose a C Conditional Operator from the list.
a) ?:
b) :?
c) :<
d) <:
Answer a

24) What is the other name for C Language ?: Question Mark Colon Operator.?
a) Comparison Operator
b) If-Else Operator
c) Binary Operator
d) Ternary Operator

Answer d

25) Choose a syntax for C Ternary Operator from the list.
a) condition ? expression1 : expression2
b) condition : expression1 ? expression2
c) condition ? expression1 < expression2
d) condition < expression1 ? expression2
Answer a

26) What is the Priority of C Logical Operators.? NOT (!), AND (&&) and OR (||)
a) NOT (!) > AND (&&) > OR (||)
b) NOT (!) > AND (&&) = OR (||)
c) AND (&&) > OR (||) > NOT (!)
d) AND (&&) = OR (||) > NOT (!)
Answer a

Unit 4 : Arrays and Strings

1. What is the maximun number of dimensions an array in c may have?
a) Two
b) eight
c) sixteen
d) Theoratically no limit. The only practical limits are memory size and compilers
answer d

2. a one dimensional array a has indices 1....75. Each element is a string and takes up three memory words. The array is stored at location 1120 decimal. The starting address of a[49] is
a) 1264
b) 1164
c) 1167
d) 1267
answer: a

3. What will be the address of the arr[2][3] if arr is a 2-d long array of 4 rows and 5 columns and starting address of the array is 2000?
a) 2048
b) 2056
c) 2052
d) 2042
answer : c

4. array can be considered as set of elements stored in consecutive memory locations but having _____.
a) Same data type
b) different data type
c) Same scope
d) None of these
answer : a

5. array is an example of _____ type memory allocation.
a) compile time
b) Run time
c) both a and b
d) None of the above
answer : a

6. Size of the array need not be specified, when
a) Initialization is a part of definition
b) It is a formal parameter

c) It is a declaratrion
d) all of the above
answer : a

7. The information about an array used in program will be stored in
a) Symbol Table
b) activation Record
c) dope Vector
d) both a and b
answer: c

8. The parameter passing mechanism for an array is
a) call by value
b) call by reference
c) call by value-result
d) None of the above
answet: b

9. a string that is a formal parameter can be declared
a) an array with empty braces
b) a pointer to character
c) both a and b
d) None of the above
answer : c

10. Which of the following function is more appropriate for reading in a multi-word string?
a) scanf()
b) printf()
c) gets()
d) puts()
answer : c

11. Length of the string "letsfindcourse" is
a) 13
b) 14
c) 15
d) 12
answer : b

12. How will you print on the screen?
a) printf(" ");
b) printf(' ');
c) printf("\n");
d) printf("" ")

answer: c

13. If the two strings are identical, then strcmp() function returns
a) -1
b) 1
c) 0
d) None
answer : c

14. Let x be an array.Which of the following operations is illegal? i) ++x. ii) x+1. iii) x++. iv) x*2.
a) I and II
b) I, III and IV
c) III and IV
d) II and III
answer : d

15. Strcat function adds null character
a) Only if there is space
b) always
c) depends on the standard
d) depends on the compiler
answer : b

16. Which of the following function sets first n characters of a string to a given character?
a) strset()
b) strnset()
c) strcset()
d) strinit()
answer : b

17. The library function used to find the last occurrence of a character in a string is
a) strnstr()
b) laststr()
c) strrchr()
d) strstr()
answer: c

18. Which of the following gives the memory address of the first element in array foo, an array with 10 elements?
a) foo
b) &foo
c) foo[0]
d) &foo[0]
answer : a

19. What will happen if in a c program you assign a value to an array element whose subscript exceeds the size of array?
a) The element will be set to 0.
b) The compiler would report an error.
c) The program may crash
d) None of the above
answer : c

20. an array elements are always stored in _____ memory locations.?
a) Sequential
b) Random
c) Sequential and Random
d) None of the above
answer: a

21. Let x be an array. Which of the following operations are illegal? I. ++x II. x+1 III. x++ IV. x*2
a) I and II
b) I, II and III
c) II and III
d) I, III and IV
answer : d

22. For 'c' programming language
a) constant expressions are evaluated at compile
b) String constants can be concatenated at compile time
c) Size of array should be known at compile time
d) all of these
answer d

23. What is the maximun number of dimensions an array in c may have?
a) Two
b) Eight
c) Twenty
d) Theoretically no limit. The only practical limits are memory size and compilers
answer d

24. If S is an array of 80 characters, then the value assigned to S through the statement scanf("%s",S) with input 12345 would be
a) "12345"
b) nothing since 12345 is an integer
c) S is an illegal name for string
d) %s cannot be used for reading in values of S
answer a

25. Size of the array need not be specified, when
a) Initialization is a part of definition
b) It is a declaration
c) It is a formal parameter
d) all of these
answer a

26. a one dimensional array a has indices 1....75.Each element is a string and takes up three memory words. The array is stored starting at location 1120 decimal. The starting address of a[49] is
a) 1167
b) 1164
c) 1264
d) 1169
answer c

27. Minimum number of interchange needed to convert the array 89,19,40,14,17,12,10,2,5,7,11,6,9,70, into a heap with the maximum element at the root is
a) 0
b) 1
c) 2
d) 3
answer c

28. Which of the following is an illegal array definition?
a) Type cOLOGNE:(LIME,PINE,MUSK,MENTHOL); var a:array[cOLOGNE]of REaL;
b) var a:array[REaL]of REaL;
c) var a:array['a'..'Z']of REaL;
d) var a:array[bOOLEaN]of REaL;
answer b

29. Minimun number of comparison required to compute the largest and second largest element in array is
a) n-[$\log_2$n]-2
b) n+[$\log_2$n-2]
c) $\log_2$n
d) None of these
answer b

30. The information about an array used in a program will be sorted in
a) Symbol table
b) activation record
c) both (a) and (b)
d) dope vector
answer d

31. In which of the following cases, linked list implementation of sparse matrices consumes the same memory space as the conventional way of storing the entire array?
a) 5x6 matrix with 9 non-zero entries
b) 5x6 matrix with 10 non-zero entries
c) Efficient in accessing an entry
d) Efficient if the sparse matrix is a band matrix
answer c

32. The minmum number of inter changes needed to convert the array 89,19,40,17,12,10,2,5,7,11,6,9,70 into a heap with maximum element at the root is
a) 1
b) 2
c) 4
d) None of these
answer b

33. The const feature can be applied to
a) an identifier
b) an array
c) an array argument
d) all of these
answer d

34. choose the correct statements
a) all The elements of the array should be of the same data type and storage class
b) The number of subscripts determines the dimension of the array
c) The array elements need not be of the same storage class
d) In an array definition. the subscript can be any expression yielding a non-zero integer value
answer b

35. The parameter passing mechanism for an array is
a) call by value
b) call by value-result
c) call by reference
d) none of these
answer c

36. consider the statement int val[2] [4] = { 1, 2, 3, 4, 5, 6, 7, 8} ; 4 will be the value of
a) val[0][3]
b) val[0][4]
c) val[1][1]
d) none of the above
answer a

37. The maximum number of dimension an array can have in c is
a) 3
b) 4
c) 5
d) compiler dependent
answer d

38. Under which of the following conditions, the size of an one-dimensional array need not be specified?
a) when initialization is a part of definition
b) when it is a declaration
c) when it is a formal parameter and an actual argument
d) all of the above
answer d

39. If a two dimensional array is used as a formal parameter, then
a) both the subscripts may be left empty
b) the first (row) subscript may be left empty
c) the first subscript must be left empty
d) both the subscripts must be left empty
answer b

40. c does no automatic array bound checking. This is
a) true
b) false
c) c's asset
d) c's shortcoming
answer d

41. If n has the value 3, then the statement a [++n] = n++ ;
a) assigns 3 to a [5]
b) assigns 4 to a [5]
c) assigns 4 to a [4]
d) what is assigned is compiler-dependent
answer d

42. choose the statement that best defines an array
a) It is a collection of items that share a common name
b) It is a collection of items that share a common name and occupy consecutive memory location
c) It is a collection of items of the same type and storage class that share a common name and occupy consecutive memory locations
d) None of the above
answer c

43. choose the correct statements
a) Strictly speaking c supports 1-dimensional arrays only
b) an array element may be an array by itself
c) array elements need not occupy contiguous memory locations
d) both (a) and (b)
answer d

44. a set of names can be represented as a
a) two-dimensional array of characters
b) one-dimensional array of strings
c) one-dimensional array of pointers to character
d) all of above
answer d

45. If arr is a two dimensional array of 10 rows and 12 columns, then arr (5) logically points to the
a) sixth row
b) Fifth row
c) fifth column
d) sixth column
answer a

46. While sorting a set of names, representing the names as an array of pointers is preferable to representing the names as a two dimensional array of characters because
a) storage needed will be proportional to the size of the data
b) execution will be faster
c) swapping process becomes easier and faster
d) all of the above
answer d

47. choose the correct statements
a) an entire array can be passed as an argument to a function
b) a part of an array can be passed as argument to a function
c) any change done to an array that is passed as an argument to a function will be local to the function
d) both (a) & (b)
answer d

48. Pick the correct answers if x is an one dimensional array, then
a) &x[i] is same as x + i - 1
b) *(x + 1) is same as *(&x [i])
c) *(x + i) is same as x[i]
d) both (b) & (c)
answer d

49. What is the maximun number of dimensions an array in C may have?

a) Two
b) eight
c) sixteen
d) Theoretically no limit. The only practical limits are memory size and compilers
Answer d

50. A one dimensional array A has indices 1....75. Each element is a string and takes up three memory words. The array is stored at location 1120 decimal. The starting address of A[49] is

a) 1264
b) 1164
c) 1167
d) 1267

Answer a

Unit 5 : Functions

1. Which of the following is a correct format for declaration of function?
a) return-type function-name(argument type);
b) return-type function-name(argument type){}
c) return-type (argument type)function-name;
d) all of the mentioned
Answer: a

2. Which of the following function declaration is illegal?
a) int 1bhk(int);
b) int 1bhk(int a);
c) int 2bhk(int*, int []);
d) all of the mentioned
Answer: d

3. Can we use a function as a parameter of another function? [Eg: void wow(int func())].
a) Yes, and we can use the function value conveniently
b) Yes, but we call the function again to get the value, not as convenient as in using variable
c) No, C does not support it
d) This case is compiler dependent
Answer: c
.
4. The value obtained in the function is given back to main by using _____ keyword.
a) return
b) static
c) new
d) volatile
Answer: a

5. What is the return-type of the function sqrt()?
a) int
b) float
c) double
d) depends on the data type of the parameter
Answer: c

6. What is the default return type if it is not specified in function definition?
a) void
b) int
c) double
d) short int
Answer: b

7. Functions can return structure in C?
a) True
b) False
c) Depends on the compiler
d) Depends on the standard
View Answer
Answer: a
Explanation: None.

8. Functions can return enumeration constants in C?
a) true
b) false
c) depends on the compiler
d) depends on the standard
View Answer
Answer: a
Explanation: None.

9. Functions in C are always _____
a) Internal
b) External
c) Both Internal and External
d) External and Internal are not valid terms for functions
View Answer
Answer: b
Explanation: None.

10. Global variables are _____
a) Internal
b) External
c) Both Internal and External
d) None of the mentioned
View Answer
Answer: b

11. Property of the external variable to be accessed by any source file is called by the C90 standard as _____
a) external linkage
b) external scope
c) global scope
d) global linkage
View Answer
Answer: a
Explanation: None.

12. 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
View Answer
Answer: d
Explanation: None.

5. 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 compiled
View Answer
Answer: d

13. Which of following is not accepted in C?
a) static a = 10; //static as
b) static int func (int); //parameter as static
c) static static int a; //a static variable prefixed with static
d) all of the mentioned
View Answer
Answer: c
Explanation: None.

14. Which of the following cannot be static in C?
a) Variables
b) Functions
c) Structures
d) None of the mentioned
View Answer
Answer: d

15. Functions have static qualifier for its declaration by default.
a) True
b) False
c) Depends on the compiler
d) Depends on the standard
View Answer
Answer: b
Explanation: None.

16. Is initialization mandatory for local static variables?
a) Yes
b) No
c) Depends on the compiler
d) Depends on the standard
View Answer
Answer: b

17. Assignment statements assigning value to local static variables are executed only once.
a) True
b) False
c) Depends on the code
d) None of the mentioned
View Answer
Answer: b
Explanation: None.

18. What is the format identifier for "static a = 20.5;"?
a) %s
b) %d
c) %f
d) Illegal declaration due to absence of data type
View Answer
Answer: b
Explanation: None.

19. Which of the following is true for the static variable?
a) It can be called from another function
b) It exists even after the function ends
c) It can be modified in another function by sending it as a parameter
d) All of the mentioned
View Answer
Answer: b

20. register keyword mandates compiler to place it in machine register.
a) True
b) False
c) Depends on the standard
d) None of the mentioned
View Answer
Answer: b

21. Register storage class can be specified to global variables.
a) True
b) False
c) Depends on the compiler
d) Depends on the standard
View Answer
Answer: b
Explanation: None.

22. Which among the following is wrong for "register int a;"?
a) Compiler generally ignores the request
b) You cannot take the address of this variable
c) Access time to a is critical

d) None of the mentioned
View Answer
Answer: d

23. When compiler accepts the request to use the variable as a register?
a) It is stored in CPU
b) It is stored in cache memory
c) It is stored in main memory
d) It is stored in secondary memory
View Answer
Answer: a
Explanation: None.

24. Which data type can be stored in register?
a) int
b) long
c) float
d) all of the mentioned
View Answer
Answer: d
Explanation: None.

25. Which of the following operation is not possible in a register variable?
a) Reading the value into a register variable
b) Copy the value from a memory variable
c) Global declaration of register variable
d) All of the mentioned
View Answer
Answer: d
Explanation: None.

26. Which among the following is the correct syntax to declare a static variable register?
a) static register a;
b) register static a;
c) Both static register a; and register static a;
d) We cannot use static and register together
View Answer
Answer: d
Explanation: None.

27. Register variables reside in _____
a) stack
b) registers
c) heap
d) main memory
View Answer

Answer: b
Explanation: None.

28. What is the scope of an automatic variable?
a) Within the block it appears
b) Within the blocks of the block it appears
c) Until the end of program
d) Within the block it appears & Within the blocks of the block it appears
View Answer
Answer: d
Explanation: None.

29. Automatic variables are allocated space in the form of a _____
a) stack
b) queue
c) priority queue
d) random
View Answer
Answer: a
Explanation: None.

30. Which of the following is a storage specifier?
a) enum
b) union
c) auto
d) volatile
View Answer
Answer: c
Explanation: None.

31. If storage class is not specified for a local variable, then the default class will be auto.
a) True
b) False
c) Depends on the standard
d) None of the mentioned
View Answer
Answer: a

32. Automatic variables are stored in _____
a) stack
b) data segment
c) register
d) heap
View Answer
Answer: a
Explanation: None.

33. What linkage does automatic variables have?
a) Internal linkage
b) External linkage
c) No linkage
d) None of the mentioned
View Answer
Answer: c

34. Automatic variables are _____
a) Declared within the scope of a block, usually a function
b) Declared outside all functions
c) Declared with the auto keyword
d) Declared within the keyword extern
View Answer
Answer: a
Explanation: None.

35. What is the scope of an automatic variable?
a) Exist only within that scope in which it is declared
b) Cease to exist after the block is exited
c) Exist only within that scope in which it is declared & exist after the block is exited
d) All of the mentioned
View Answer
Answer: c
Explanation: None.

36. Automatic variables are allocated memory in _____
a) heap
b) Data segment
c) Code segment
d) stack
View Answer
Answer: d

37. Automatic variables are initialized to _____
a) Zero
b) Junk value
c) Nothing
d) Both Zero & Junk value
View Answer
Answer: b
Explanation: None.

38. Which of the following storage class supports char data type?
a) register
b) static
c) auto

d) all of the mentioned
View Answer
Answer: d
Explanation: None.

39. A local variable declaration with no storage class specified is by default _____
a) auto
b) extern
c) static
d) register
View Answer
Answer: a
Explanation: None.

40.Use of fnction___
a) Helps to avoid repeating a set of statements many times.
b) Enhances the logical clarity of the program.
c) Helps to avoid repeated programming across programs.
d) All of the above
Answer: d

41. Any C Program _____
a) Must contain at least one function.
b) Need not contain any function.
c) Needs input data.
d) None of the above
Answer: a

42. Choose correct statement about Functions in C Language.
a) A Function is a group of c statements which can be reused any number of times.
b) Every Function has a return type.
c) Every Function may no may not return a value.
d) All the above.
Answer d

43. Choose a correct statement about C Language Functions.
a) A function name can not be same as a predefined C Keyword.
b) A function name can start with an Underscore(_) or A to Z or a to z.
c) Default return type of any function is an Integer.
d) All the above.
Answer d

44. A function which calls itself is called a ___ function.
a) Self Function
b) Auto Function
c) Recursive Function

d) Static Function
Answer c

45. How many values can a C Function return at a time.?
a). Only One Value
b) Maximum of two values
c) Maximum of three values
d) Maximum of 8 values
Answer a

46. What are types of Functions in C Language.?
a) Library Functions
b) User Defined Functions
c) Both Library and User Defined
d) None of the above
Answer c

47. Choose correct statements about C Language Pass By Value.
a) Pass By Value copies the variable value in one more memory location.
b) Pass By Value does not use Pointers.
c) Pass By Value protects your source or original variables from changes in outside functions or called functions.
d) All the above
Answer: d

48. What is the limit for number of functions in a C Program.?
a) 16
b) 31
c) 32
d) None of the above
Answer d

49. Every C Program should contain which function.?
a) printf()
b) show()
c) scanf()
d) main()
Answer d

50. What is the minimum number of functions to be present in a C Program.?
a) 1
b) 2
c) 3
d) 4
Answer a