

SUBJECT: BACHELOR OF COMPUTER APPLICATIONS

PAPER NAME: Programing language through C

PAPER NO: BCA/2/CC/09

SEMESTER : SECOND SEMESTER

A. Multiple choice questions

1. 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

2. Which is correct with respect to the size of the data types?
 - a) char > int > float
 - b) int > char > float
 - c) char < int < double
 - d) double > char > int

3. The name of the variable used in one function cannot be used in another function.
 - a) True
 - b) False
 - c) partially true
 - d) partially false

4. The format identifier ‘%i’ is also used for _____ data type.
 - a) char
 - b) int
 - c) float
 - d) double

5. 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) all of the mentioned

6. putchar (c) function/macro always outputs character c to the _____
 - a) screen
 - b) standard output

- c) depends on the compiler
 - d) depends on the standard
7. What does scanf () function return?
- a) Number of successfully matched and assigned input items
 - b) Nothing
 - c) Number of characters properly printed
 - d) Error
8. Which among the following has the highest precedence?
- a) &
 - b) <<
 - c) sizeof()
 - d) &&
9. Libray function getch() belongs to which header file?
- a) stdio.h
 - b) conio.h
 - c) stdlib.h
 - d) math.h
10. Which of the following function is more appropriate for reading in a multi-word string?
- a) scanf()
 - b) printf()
 - c) gets()
 - d) puts()
11. Which of the following is true for variable names in C?
- a) Variable names cannot start with a digit
 - b) Variable can be of any length
 - c) They can contain alphanumeric characters as well as special characters
 - d) Reserved Word can be used as variable name
12. For 16-bit compiler allowable range for integer constants is _____ ?
- a) -3.4e38 to 3.4e38
 - b) -32767 to 32768
 - c) -32768 to 32767
 - d) -32668 to 32667

13. What is C Tokens?

- a) The smallest individual units of c program
- b) The basic element recognized by the compiler
- c) The largest individual units of program
- d) Both A & B

14. The geometrical represent shown below in flowchart represents



- a) Input/output
- b) Alternate process
- c) Decision
- d) Looping

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16. The C code 'for(;;)' represents an infinite loop. It can be terminated by _____

- a) Break
- b) Exit(0)
- c) Abort()
- d) Terminate

17. Which keyword can be used for coming out of recursion?

- a) Break
- b) Return
- c) Exit
- d) Both break and return

18. The keyword 'break' cannot be simply used within _____

- a) Do-while
- b) If-else
- c) For
- d) While

19. Which keyword is used to come out of a loop only for that iteration?
- a) Break
 - b) Continue
 - c) Return
 - d) Skip
20. How many main() function we can have in our project?
- a) 0
 - b) 1
 - c) No limit
 - d) Depends on compiler
21. How many times the for loop for(i=0;i=3;i++) will run?
- a) Four times
 - b) Three times
 - c) Forever
 - d) Never
22. Continue statement cannot be used with
- a) For loop
 - b) Switch
 - c) Do loop
 - d) While loop
23. The minimum execution of while loop is
- a) 0
 - b) 1
 - c) 2
 - d) 3
24. 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-)

25. goto can be used to jump from main() to within a function.
- a) True
 - b) False
 - c) Depends
 - d) Varies
26. 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) All of the above
27. What is the way to suddenly come out of or quit any loop in C?
- a) continue; statement
 - b) break; statement
 - c) leave; statement
 - d) quit; statement
28. Which loop is fastest in C language?
- a) For
 - b) While
 - c) Do while
 - d) All work at same speed
29. What is the output of a program?
- ```
int main()
{
int a=25;
while(a<=27)
{
printf("%d",a);
a++;
}
return 0;
}
```
- a) 25 25 25
  - b) 25 26 27
  - c) 27 27 27
  - d) Compiler error

30. What is the output of the following

```
int main()
{
int k;
for(k=1;k<=5;k++);
{
printf(“%d”,k);
}
return 0;
}
```

- a) 1 2 3 4 5
- b) 1 2 3 4
- c) 6
- d) 5

31. What is function?

- a) Function is a block of statements that perform some specific task.
- b) Function is the fundamental modular unit. A function is usually designed to perform a specific task.
- c) Function is a block of code that performs a specific task. It has a name and it is reusable
- d) All the above

32. Main() is

- a) User-define function
- b) build-in function
- c) library function
- d) both a&b

33. Use of functions

- a) Helps to avoid repeating a set of statements many times
- b) Enhances the logical clarity of the program
- c) Makes the debugging task easier
- d) All of the above

34. 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

35. 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
36. Which of the following is a storage specifier?
- a) Enum
  - b) Union
  - c) Auto
  - d) Volatile
37. Functions in C are always \_\_\_\_\_
- a) Internal
  - b) External
  - c) Both Internal and External
  - d) External and Internal are not valid terms for functions
38. Global variables are \_\_\_\_\_
- a) Internal
  - b) External
  - c) Both Internal and External
  - d) Both are not Internal and External
39. Which of the following is a User-defined data type?
- a) `typedef int Boolean;`
  - b) `typedef enum { Mon, Tue, Wed, Thu, Fri } Workdays;`
  - c) `struct { char name[10], int age};`
  - d) all of the mentioned
40. In C, parameters are always
- a) Passed by value
  - b) Passed by reference
  - c) Non-pointer variables are passed by value and pointers are passed by reference
  - d) Passed by value result

41. Which of the following is true about return type of functions in C?
- Functions can return any type
  - Functions can return any type except array and functions
  - Functions can return any type except array, functions and union
  - Functions can return any type except array, functions, function pointer and union
42. What is the default return type if it is not specified in function definition?
- Void
  - Int
  - Short int
  - Float
43. Pick the correct statements
- The body of a function should have only one return statement.
  - The body of a function may have many return statements.
  - A function can return only one value to the calling environment.
  - If return statement is omitted, then the function does its job but returns no value to the calling environment.
- 1 & 2
  - 1 & 3
  - 2 & 3
  - 2 & 4
44. Value of static storage variable
- Changes during different function calls
  - persists between different function calls
  - increases during different function calls
  - decreases during different function calls
45. What is the initial value of extern storage class specifier?
- 0
  - 1
  - garbage
  - infinite



**UNIT IV**

46. Which is an indirection operator among the following?
- a) &
  - b) \*
  - c) ->
  - d) .
47. Which of the following does not initialize ptr to null (assuming variable declaration of a as int a=0;)?
- a) int \*ptr = &a;
  - b) int \*ptr = &a - &a;
  - c) int \*ptr = a - a;
  - d) All of the mentioned
48. Which of the following is the correct syntax to send an array as a parameter to function?
- a) func(&array);
  - b) func(#array);
  - c) func(\*array);
  - d) func(array[size]);
49. 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 if some important data gets overwritten.
  - d) The array size would appropriately grow.
50. In C, if you pass an array as an argument to a function, what actually gets passed?
- a) Value of elements in array
  - b) First element of the array
  - c) Base address of the array
  - d) Address of the last element of array
51. The parameter passing mechanism for an array is
- a) call by value
  - b) call by reference
  - c) call by value-result
  - d) depends on compiler

52. An array elements are always stored in \_\_\_\_\_ memory locations.
- a) Sequential
  - b) Random
  - c) Sequential and Random
  - d) Depends on compiler
53. What is right way to initialization array?
- a) `int num[6] = { 2, 4, 12, 5, 45, 5 } ;`
  - b) `int n{} = { 2, 4, 12, 5, 45, 5 } ;`
  - c) `int n{6} = { 2, 4, 12 } ;`
  - d) `int n(6) = { 2, 4, 12, 5, 45, 5 } ;`
54. Address stored in the pointer variable is of type \_\_\_\_\_.
- a) Integer
  - b) Float
  - c) Array
  - d) Character
55. In order to fetch the address of the variable we write preceding \_\_\_\_\_ sign before variable name.
- a) Percent(%)
  - b) Comma(,)
  - c) Ampersand(&)
  - d) Asteric(\*)
56. Comment on this  
`const int *ptr;`
- a) You cannot change the value pointed by ptr
  - b) You cannot change the pointer ptr itself
  - c) Both (a) and (b)
  - d) You can change the pointer as well as the value pointed by it
57. Choose the best one  
prior to using a pointer variable
- a) It should be declared.
  - b) It should be initialized.
  - c) It should be both declared and initialized.
  - d) None of the above.

58. Which of the following statements are correct about the given program?

```
#include<stdio.h>
int main()
{
 printf("%p", main());
 return 0;
}
```

- a) Prints garbage value infinite times
- b) Error
- c) Runs infinite times without printing anything
- d) Depends on compiler

59. What is the maximum number of dimensions an array in C may have?

- a) 2
- b) 8
- c) 16
- d) Theoretically no limit. The only practical limits are memory size and compilers

60. 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 declaration
- d) All of the above

61. Which of the following are themselves a collection of different data types?

- a) string
- b) structures
- c) char
- d) all of the mentioned

62. Which operator connects the structure name to its member name?

- a) –
- b) <-
- c) .
- d) Both <- and .

63. What is typedef declaration?
- Does not create a new type
  - It merely adds a new name for some existing type
  - Does not create a new type, It merely adds a new name for some existing type
  - None of the mentioned
64. The size of a union is determined by the size of the \_\_\_\_\_
- First member in the union
  - Last member in the union
  - Biggest member in the union
  - Sum of the sizes of all members
65. Members of a union are accessed as \_\_\_\_\_
- union-name.member
  - union-pointer->member
  - both union-name.member & union-pointer->member
  - union-name%member
66. What do the 'c' and 'v' in **argv** stands for?
- 'c' means argument control 'v' means argument vector
  - 'c' means argument count 'v' means argument vertex
  - 'c' means argument count 'v' means argument vector
  - 'c' means argument configuration 'v' means argument visibility
67. Which of the following true about FILE \*fp
- FILE is a keyword in C for representing files and fp is a variable of FILE type.
  - FILE is a stream
  - FILE is a buffered stream
  - FILE is a structure and fp is a pointer to the structure of FILE type
68. The first and second arguments of fopen() are
- A character string containing the name of the file & the second argument is the mode
  - A character string containing the name of the user & the second argument is the mode
  - A character string containing file pointer & the second argument is the mode
  - all of the above

69. FILE is of type \_\_\_\_\_
- a) int type
  - b) char \* type
  - c) struct type
  - d) float \*type
70. A data of the file is stored in ...
- a) Ram
  - b) Hard disk
  - c) Rom
  - d) Eprom
71. Select a function which is used to write a string to a file...
- a) fputs()
  - b) fgets()
  - c) fputc()
  - d) fgetc()
72. What is the meant by 'a' in the following operation?  
fp = fopen("letsfindcourse.txt", "a");
- a) Attach
  - b) Append
  - c) Apprehend
  - d) Add
73. What is the need for closing a file?
- a) fclose(fp) closes a file to release the memory used in opening a file.
  - b) Closing a file clears Buffer contents from RAM or memory.
  - c) Unclosed files occupy memory and PC hangs when on low memory.
  - d) All the above
74. User-defined data type can be derived by\_\_\_\_\_
- a) struct
  - b) enum
  - c) typedef
  - d) all of the mentioned

75. What is the first argument in command line arguments?

- a) The number of command-line arguments the program was invoked with;
- b) A pointer to an array of character strings that contain the arguments
- c) Nothing
- d) all of the above

**B. Fill up the blanks**

1. The sizeof(char) in a 32-bit C compiler is \_\_\_\_\_ byte.
2. All keywords in C are in \_\_\_\_\_ case letter.
3. C program execution begins from \_\_\_\_\_.
4. There are \_\_\_\_\_ keyword in C Programming.
5. Consider the following statement:  
a=10;  
b=++a;  
Then the value of b is \_\_\_\_\_.
6. A user defined data type, which is used to assign names to integral constants is called \_\_\_\_\_.
7. There are \_\_\_\_\_ different types loops in C.
8. The number of minimum execution of do...while loop is \_\_\_\_\_.
9. An \_\_\_\_ loop is a piece of coding that lacks a functional exit so that it repeats indefinitely.
10. A loop inside another loop is called a \_\_\_\_\_ loop.
11. The function with no return type is declare as \_\_\_\_\_.
12. The initial value of register storage class is \_\_\_\_\_.
13. The function call itself is known as \_\_\_\_\_ function.
14. \_\_\_\_\_ method copies the address of an argument into the formal parameter.
15. The initial value of extern storage class is \_\_\_\_ zero.
16. Size of array is known at \_\_\_\_\_.
17. An array is a collection of data elements of the same \_\_\_\_\_.
18. \_\_\_\_\_ is a variable that store address of other variable.  
The first index of an array is \_\_\_\_\_.
19. "&" is called as \_\_\_\_\_ in pointer concept.
20. Typedef is used to create a \_\_\_\_\_ for an existing data type.
21. An array of similar data types which themselves are a collection of dissimilar data type are \_\_\_\_\_.
22. Structures which points to the same type of structures is known as \_\_\_\_\_.
23. \_\_\_\_\_ are arguments that are passed to the main function of the command prompt.
24. When fopen() is not able to open a file, it returns \_\_\_\_\_.

## KEY ANSWERS

### A. Multiple Choice questions.

- |     |   |     |   |     |   |     |   |     |   |     |   |      |
|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|------|
| 1.  | C | 2.  | C | 3.  | B | 4.  | B | 5.  | C | 6.  | B | 7.A  |
| 8.  | C | 9.  | A | 10. | C | 11. | A | 12. | C | 13. | D | 14.C |
| 15. | A | 16. | A | 17. | B | 18. | B | 19. | B | 20. | B | 21.D |
| 22. | B | 23. | A | 24. | D | 25. | B | 26. | C | 27. | B | 28.D |
| 29. | B | 30. | C | 31. | D | 32. | A | 33. | D | 34. | A | 35.D |
| 36. | C | 37. | B | 38. | B | 39. | D | 40. | A | 41. | B | 42.B |
| 43. | C | 44. | B | 45. | A | 46. | B | 47. | A | 48. | A | 49.C |
| 50. | C | 51. | A | 52. | A | 53. | A | 54. | A | 55. | C | 56.A |
| 57. | C | 58. | C | 59. | D | 60. | A | 61. | B | 62. | C | 63.C |
| 64. | C | 65. | C | 66. | C | 67. | D | 68. | A | 69. | C | 70.B |
| 71. | B | 72. | B | 73. | D | 74. | D | 75. | A |     |   |      |

### B. Fill up the blanks.

- 1.
2. lower
3. main()
4. 32
5. 11
6. enum
7. 3
8. 1
9. infinite loop
10. nested loop
11. void
12. garbage

13. **recursive**
14. **call by reference**
15. **zero**
16. **Compile time**
17. **data type**
18. **pointer**
19. **zero**
20. **Address operator**
21. **synonyms**
22. **array of structure**
23. **self-referential structure**
24. **Command-line argument**
25. **NULL**