1. **When we use the** case control **structure?**
    a. **To choose one from multiple alternatives**
    b. To switch from one instruction to another
    c. To make the execution fast
    d. None of the above

2. **Recursion is sometimes called?**
    a. **Circular definition**
    b. Complex definition
    c. Procedure
    d. Union

3. **Given the statement, maruti.engine.bolts = 25. Which of the following is true?**
    a. Structure bolts is nested within structure engine
    b. **Structure engine is nested within structure maruti**
    c. Structure maruti is nested within structure engine
    d. Structure maruti nested within structure bolts

4. **The statement that transfer control to the beginning of the loop is called?'**
    a. break statement
    b. exit statement
    c. **continue statement**
    d. goto statement

5. **If an array is used as function argument, the array is passed?**
    a. by value
    b. **by address**
    c. by name
    d. the array cannot be used as function argument

6. **What will be the output?**

```
#include<stdio.h>
int main( )
{
    int k=35;
    printf("%d%d%d",k==35,k=50,k>40);
}
```

    a. 35,50,40
    b. **0,50,0**
    c. 0,0,0
    d. 1,1,1

7. What will be the output of following program ?

```
#include<stdio.h>
void main( )
{
    int i;
    for(i=1;i<=5;printf("%d",i));
        i++;
 }
```

a. Error
b. Garbage values
c. 1 to 5
d. Infinite loop

8. Which of the following is false in C?

a. Keywords cannot be used as variable names
b. Variable names can contain a digit
c. Variable names do not contain a blank space
d. Capital letters can be used in variable names

9. Null pointer and UN-initialized pointers **are same?**

a. True
b. False
c. Varies from program to program
d. None of Above

10. Null pointer is?

a. A pointer which does not point anywhere
b. Pointer defined with name Null
c. A pointer that returns 0 values
d. None of Above

11. The function ____ obtains block of memory dynamically.

a. Calloc
b. Malloc
c. Both a & b
d. Free

12. void * malloc(size_t n) returns

a. Pointer to n bytes of uninitialized storage
b. NULL if the request cannot be satisfied
c. Nothing
d. Both a & b are true

13. Which among the following is the correct syntax to declare a static variable register?

a. static register a;
b. register static a;
c. Both (a) and (b)
d. We cannot use static and register together.

14. Which of the following is true for 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

15. Which of the following can never be sent by call-by-value?

a. Variable
b. Array
c. Structures
d. Both (b) and (c)

16. Which type of variables can have same name in different function:

a. global variables
b. static variables
c. Function arguments
d. Both (b) and (c)

17. The syntax for constant pointer to address (i.e., fixed pointer address) is:

a. const <type> * <name>
b. <type> * const <name>
c. <type> const * <name>
d. Both (a) and (c)

18. What is the problem in the following declarations?

```
int func(int);
double func(int);
int func(float);
```

a. A function with same name cannot have different signatures
b. A function with same name cannot have different return types
c. A function with same name cannot have different number of parameters
d. All of the mentioned

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

a. String
b. Structures
c. Char
d. All of the mentioned

20. Which of the following cannot be a structure member?

a. Another structure
b. Function
c. Array
d. None of the mentioned

21. The correct syntax to use typedef for struct is.

a.
```
typedef struct temp
 {
    int a;
 }TEMP;
```
b.
```
typedef struct
 {
    int a;
  }TEMP;
```
c.
```
struct temp
 {
    int a;
 };
 typedef struct temp TEMP;
```
d. All of the mentioned

22. Which of the following is FALSE about typedef?

a. typedef follow scope rules
b. typedef defined substitutes can be redefined again. (Eg: typedef char a; edef int a;)
c. You cannot typedef a typedef with other term.
d. All of the mentioned

23. Which of the following is not possible?

a. A structure variable pointing to itself
b. A structure variable pointing to another structure variable of same type
c. 2 different type of structure variable pointing at each other.
d. None of these

24. What will be the output of the following code?

```
#include "stdio.h"
#include "string.h"
void main(){
   char *str=NULL;
   strcpy(str,"cquestionbank");
   printf("%s",str);
}
```

a. cquestionbank
b. cquestionbank\0
c. (null)
d. Compilation error

25. What will be output if you will compile and execute the following c code?

```
#define max 5;
void main(){
 int i=0;
i=max++;
printf("%d",i++);
}
```

a. 5
b. 6
c. 7
d. Compiler error

26. 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.

27. 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. Address of the last element of array
d. Base address of the array

28. How can I dynamically allocate a two-dimensional array?

a.
```
int **array1 = (int **)malloc(nrows * sizeof(int *));
for(i = 0; i < nrows; i++)
array1[i] = (int *)malloc(ncolumns * sizeof(int));
```
b.
```
int **array2 = (int **)malloc(nrows * sizeof(int *));
array2[0] = (int *)malloc(nrows * ncolumns * sizeof(int));
for(i = 1; i < nrows; i++)
array2[i] = array2[0] + i * ncolumns;
```
c. `int *array3 = (int *)malloc(nrows * ncolumns * sizeof(int));`
d. Any of the above.

29. A recursive function would result in infinite recursion, if the following were left out:

a. Base case
b. Recursive call
c. Subtraction
d. Local variable declarations

30. Which of the following provides conceptual support for function calls?

a. The System Stack
b. The Data Segment
c. The heap
d. The processor's register

31. For 'C' Programming Language

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

32. If storage class is missing in the array definition, by default it will be taken to be

a. Automatic
b. External
c. Static
d. Either automatic or external depending on the place of occurrence

33. What will be the output of the following statement?

```
printf( 3 + "goodbye");
```

a. goodbye
b. odbye
c. bye
d. dbye

34. It is necessary to declare the type of a function in the calling program if

a. the function returns an integer
b. the function returns a non-integer
c. the function is not defined in the same file
d. none of these

35. Which of the following statement is not true?

a. A function may be placed either after or before the main() function
b. A function may or may not return a value. If it does, it can return only one value
c. A function can be defined inside another function
d. A variable that has been declared as static inside a function retains its value even after the function is exited.

36. Choose the wrong one

a. A structure can be nested within same structure
b. A value of one structure variable can be assigned to another structure variable of same or different type.
c. It is illegal to use the structure itself as its member.
d. In self-referential structure one member must be a pointer type.

37.
```
void main()
{
        printf("%u",main);
        getch();
}
```

a. Garbage value
b. Run time error
c. Printing starting address of function main
d. Infinite loop

38. Find the incorrect one for ‘typedef ’ statement

a. Permits descriptive names for datatypes.
b. Renaming existing datatype
c. Modification of the program is easier when host machine is changed.
d. All of the above

39. What is the work of break keyword?

a. Halt execution of program
b. Restart execution of program
c. Exit from loop or switch statement
d. None of the above

40. 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

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