

1. A C variable cannot start with
a dollar symbol
a special symbol other than underscore
a digit

all of the above choices

2. _____ variable is initialized only once and remains into existence till the end of program?

register

external

static

automatic

3. In C, parameters are always

Passed by reference

Non-pointer variables are passed by value and pointers are passed by reference

Passed by value

Passed by value result

4. In the below statement, ptr1 and ptr2 are uninitialized pointers to int i.e they are pointing to some random address that may or may not be valid address

True

False

5. is the NULL pointer same as an uninitialized pointer?

False

True

6. A variable which is visible only in the function in which is defined, is called _____

auto variable

local variable

static variable

external variable

7. Which are of the following is not a valid identifier?

_examVar

examVar

\$examVar

1examVar

8. We use pointers in a C program because...

Pointers allow different functions to share and modify their local variables

To pass large structures so that complete copy of the structure can be avoided

Pointers enable complex "linked date" data structures like linked lists and binary trees.

All of the above

9. C programs are converted into machine language with the help of _____

a compiler

an Editor

an operating system

none of these

10. A pointer variable can be

Passed to a function as an argument

Returned by a function

Changed within function

All of the answers

11. _____ in programming language are used to make programs more readable by naming actions to be performed.

Special words

Statements

Operators

Labels

12. Direct descendants of C alongside with itself do not allow subprogram nesting.

False, except C

True for all

True, except C

False for all

13. The scopes created by blocks, which could be nested in larger blocks, are treated exactly those created by subprograms.

It is a true sentence

It is a false sentence

Cannot be compared the two things

It depends on the language

14. _____ can have _____ entry points, which are controlled by the _____ themselves

Coroutines, multiple, subroutines

Coroutines, multiple, coroutines

Subroutines, single, subroutines

Subroutines, multiple, subroutines

15. Consider the following example: void func(int i, int j)

It is a subprogram header

It is a subprogram protocol

It is a subprogram profile

It is a subprogram definition

16. The _____ of a statement in a _____ language is the locally declared variables, plus the variables of all other variables of all other subprograms that are currently active.

referencing environment, static scoped

referencing environment, dynamically scoped

referencing block, dynamically scoped

referencing block, static scoped

17. In the below statement, ptr1 and ptr2 are uninitialized pointers to int i.e. they are pointing to some random address that may or may not be valid address.

True, because they are in the statement

False, because they are different type variables.

True, because they are not initialized

False, because they are pointing to the null address

18. Consider the following C function :

```
void swap(int a, int b)
{
    int temp;
    temp = a;
    a = b;
    b = temp;
}
```

In order to exchange the values of two variables x and y:

swap(x, y) cannot be used as the parameters are passed by value

swap(x, y) cannot be used as it does not return any value

Call swap (x, y)

Call swap(&x, &y)

19. Pure interpretation is often requires more space than compilation.

True, because there is the intermediate code generator

True, because it translates programs into an intermediate form

True, because e.g. the symbol table need to be available

False, there is no need for more space

20. The name for a memory location that may hold data is _____

address

variable

pointer

storage

21. Are there any difference between variable declaration and variable definition?

A declaration occurs once, but a definition may occur many times

Both can occur multiple times, but a declaration must occur first

A definition occurs once, but a declaration may occur many times

Both can occur multiple times, but a definition must occur first

There's no difference between them

22. In order to support recursion for subprograms, local variables need to be _____

stack dynamic

static

heap dynamic

implicit heap dynamic

23. Subprogram declarations provide the subprogram's _____ but _____ include their bodies.

profile, do

protocol, do not

protocol, do

profile, do not

24. A _____ is a variable that is bound to a value only once

implicit heap dynamic variable

named constant

static variable

literal constant

25. Functional side effect _____

need to be achieved as much as you can

need to be detected by the interpreter and stop interpretation

need to be avoided as much as you can

need to be detected by the compiler and stop compilation

26. The pseudocode below demonstrates a loop.

The code segment is an example of which type of loop?

```
num = 10
```

```
while(num < 20) {
```

```
    print num
```

```
    num -= 1
```

```
}
```

Statement-controlled loop

Infinite loop

Counter-controlled loop

Event-controlled loop

27. The pseudocode below demonstrates a loop.

The code segment is an example of which type of loop?

```
num = 10
```

```
while(num<20){
```

```
    print num;
```

```
    num += 1
```

```
}
```

Counter-controlled loop

Logically controlled loop

Statement-controlled loop

Infinite loop

28. Consider the following C-program:

```
double foo (double);    /* line 1*/  
  
int main()  
{  
    double da, db;  
    // input da  
    db = foo(da)  
}  
  
double foo(double a)  
{  
    return a;  
}
```

The above code compiled without any error or warning.

If Line 1 is deleted, the above code will show:

some compiler-warning due to type-mismatch eventually leading to unintended results

no compile warning to error

compiler errors

some compiler-warnings not leading to unintended results

29. What will be output of the following C code?

(Take care of scopeing!)

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
int i;
```

```
for( i = 0; i < 5; i++)
```

```
{
```

```
    int i = 10;
```

```
    printf("%d ", i);
```

```
    i++;
```

```
}
```

```
return 0;
```

Compilation error

10 10 10 10 10

0 1 2 3 4

10 11 12 13 14

30. What will be result of given code?

```
main()
{
    int i = 1
    for(;;)
    {
        printf("%d", i++)
        if(i > 5)
            break;
    }
}
```

error because condition in for loop is must

error because of two semicolon inside for loop

error because of break inside for loop

1 2 3 4 5

31. Determine output:

```
void main()
{
    int i = 10;
    i = !i>14;
    printf("i=%d", i);
}
```

None of these

14

1

0

10

32. Output?

```
int main()
{
    {
        int var = 10;
    }
    {
        printf("%d", var);
    }
    return 0;
}
```

Compiler Error

10

Garbage Value

33. Output?

```
int var = 20;

int main()
{
    {
        int var = var;
    }
    {
        printf("%d", var);
    }
    return 0;
}
```

Compiler Error

20

Garbage Value

10

34. In the following program fragment, s2 will be executed if?

```
if(a > b)
    if(b > c)
        s1;
    else
        s2;
```

*

a > b and b <= c

a <= b

b <= c and a <= b

b > c

35. In the following program fragment, $a \leq b$ will be printed if?

```
if(a > b)
    printf(" a > b ");
else
    printf("else part");
printf(" a <= b")
*
```

$a < b$

$a > b$

does not depend upon if condition

$a == b$

36. What will be output of the following program?

```
void main()
{
    int a=7, b=2, c=0
    c=a=b
    printf("%d", c);
}
*
```

2

10

7

0

37.output?

```
void main() {  
    int i = 2, j = 2  
  
    while(i + 1? -- i: j++)  
        printf("%d", i)  
}
```

*

1

2

4

6

38.Output?

```
void main()  
{  
    int i = 1  
    i = 2 + 2*i++;  
    printf("%d", i);  
}
```

*

4

5

6

7

```
39.void main()
{
    int a=0; b=10
    if(a = 0)
    {
        printf("true")
    }
    else
    {
        printf("false")
    }
}
*
```

true

false

40.Choose the correct answers -based on the C language

Select one:

IF is a valid identifier

An identifier may end with an underscore

An identifier may start with an underscore

All of the answers

41.What will be output of the following program?

```
void main()
{
    int a = 1, b = 7, c = 10;
    c = a == b;
    printf("%d", c)
}
```

*

2

7

10

0

42.If we don't initialize a static array, what will be the elements set to?

*

Character constant

A floating point number

0

An undetermined value

43. The following function computes the maximum value contained in an integer array p[] of size (n >= 1)

```
int max(int *p, int n)
{
    int a = 0, b = n - 1
    while (_____)
    {
        if(p[a] <= p[b])
        {
            a = a + 1;
        }
        else
        {
            b = b - 1;
        }
    }
    return p[a];
}
*
```

a != n

b != 0

b > (a + 1)

a != b

44. Consider the following C declaration

```
struct (  
short s[5];  
union {  
float y;  
long z;  
}u;  
}t;
```

Assume that the objects of the type short, float and long occupy 2 bytes, 4 bytes and 8 bytes, respectively. The memory requirement for variable t, ignoring alignment consideration, is

*

22 bytes

18 bytes

14 bytes

10 bytes

45.Output?

```
#include <stdio.h>
```

```
#include <string.h>
```

```
int main()
```

```
{
```

```
    char str[] = "ZERO\0\SIX\0";
```

```
    printf("%s\n", str+6)
```

```
    return 0;
```

```
}
```

```
*
```

SIX

6

12

ZERO

ZERO\0\SIX

0

```
46.#include <stdio.h>
```

```
void main() {
```

```
int a = 100;
```

```
if(a > 10)
```

```
printf("M.S Dhoni");
```

```
else if(a > 20)
```

```
printf("M.E.X Hussey");
```

```
else if(a>30)
```

```
printf("A.B de villiers");
```

```
}
```

```
*
```

M.S Dhoni

A.B de villiers

M.S Dhoni M.E.X Hussey A.B de villiers

compilation error. More than one conditions are true

None of the above

answer:ms dhoni