

## **Samsung Interview Questions and Answers**

Samsung one of the largest Consumer electronics company of world with over 4 Lakh employees globally is a South Korean company which was established in 1938 by Lee byun chull. Although today Samsung is in other sectors like Apparels & Insurance as well but Samsung is Primarily known as consumer electronics company Globally. This group is Notable Samsung industrial subsidiaries include Samsung Electronics, Samsung Heavy Industries , Samsung Engineering and Samsung C&T.

For JOB at Samsung, Samsung Conducts GSAT i.e Global Samsung Aptitude Test and students clearing are called for Interview. Let have a look at this introductory video of Samsung.

### **Interview at Samsung is divided in two parts-**

#### **1. Samsung Technical Interview Questions-**

**Ques 1) Out of the following which supports error checking and error correction in data link layer,**

- a) 802.2 LLC
- b) 802.3 CSMA/CD
- c) 802.4 Token Bus
- d) 802.5 Token Ring

Ans) a (802.2 LLC )

**Ques 2)How many bits of IP address are required to make 8 subnets**

- a) 1
- b) 2

- c) 3
- d) 4

Ans: 4 (as 000 and 111 Of 3 bits are not valid subnets so take 4 bits)

**Ques 3) Which statement were incorrect regarding multicast and broadcast options.**

Ans: Regarding whether NIC checks the multicast address or CPU.

**Ques 4) Network equipments make hierarchy in which topology?**

- a) bus
- b) star
- c) ring
- d) tree

Ans: d Tree (checkout)

**Ques 5) Which of the following is not CDMA technology.**

- a) DS-FH (Discrete spectrum-freq hopping)
- b) DS\_FT
- C) DS
- d) TDMA-FS.

Ans: d (TDMA-FS)

**Ques 6) Determine network ID of Classful IP address 192.42.14.1.**

- a) 192
- b) 192.42
- c) 192.42.14
- d) 192.42.14.1

Ans: c ( class c )

**Ques 7) What is the advantage of ADSL(Asymmetric Digital Subscriber Line) over modem.**

Ans: it has normal uplink band width but higher down link bandwidth.

**Ques 8) Why DSL is faster than normal modem ?**

**Ques 9) Minimum sampling freq for 20-20kHz analog signal is**

- a) 20khz
- b) 40khz
- c) 44.1khz
- d) 20hz

Ans: b (40khz)

**Ques 10) Advantages of digital over analog signal:**

- a) noise immunity
- b) data security and integrity
- c) efficient transmission
- d) all of the above

Ans: d (all of the above)

**Ques 11) MPEG stands for**

Ans: Moving Picture Experts Group

**Ques 12) why channel coding is done**

- a) to secure data
- b) to maintain integrity of data
- c) effective transmission of data
- d) all of above

Ans: c (effective transmission of data)

**Ques 13) Question on error resilient and sustain to burst which is**

- a) solomon code
- b) cyclic
- c) gray
- d) huffman

Ans) a (solomon code)

**Ques 14)**

```
main()
{
i=2;
printf("I=%d i=%d",++i,++i)
}
```

Ans: vary compiler to compiler

**Ques 16)**

```
main()
{ unsigned char i=0x80;
printf("i=%d",i<<1);
}
```

Ans: 256

**Ques 15)**

```
main(
{
B=0xFFFF;
~B ;
printf("%d",B);
}
```

Ans: 0xFFFF

**Ques 16)**

```
Func(int a, int b)
```

```
{  
int a;  
a=10;  
return a;  
} will there be any error
```

Ans) No error

**Ques 17) In 1.5 fixed format how is -1 represented**

- a) 0xFFFF
- b) 0xF000
- c) 0x8000
- d) 0x0001

Ans: a

**Ques 18)**

```
#define Sqr(b) b*b;  
main( )  
{  
int i=3;  
printf("%d",SQR(i+2));  
}
```

Ans: 11

**Ques 19)**

```
Main(){  
Char c=,a,;  
Printf("%d %d", sizeof(c),sizeof(,a,));  
}
```

options:-

- a) 1 1
- b) 2 2
- c) 2 1
- d) 1 4

Ans: 11

## **C Interview questions with answers**

### **1. What is a pointer?**

A pointer is a special variable, which stores the memory address. The 'ampersand' denoted by '&' and the 'dereferencing' factor denoted by '\*' are the necessities of pointers. Ampersand in front of a variable gets its address and asterisk in front of a pointer gets its value.

### **2. What is null pointer?**

Null pointer is a pointer which cannot point to anywhere in the program, but uninitialised pointer can point to anywhere in the users program. In C, if the pointer tried to access 0th location, operating system kills the running program because operating system does not allow to access 0<sup>th</sup> value.

### **3. Define function pointer?**

The function pointer is the pointer which accesses the address of a function. The running program occupies some memory space. Both the executable compiled program code and as well as user variables works on function pointers.

In the C, each function has an address in a code segment.

### **4. What is volatile variable?**

Volatile variables are those variables which alters the default way of the program.

The variable which do not change while compiling but are changeable during execution.

### **5. Difference between global and static variable?**

Static variables persist throughout the scope, but the lifespan is not throughout the program. Global variables persist throughout the scope of base blocks of memory that is their lifespan is throughout the program.

### **6. What are the files automatically opened when C file is executed?**

Standard in, standard out, standard error (stdin, stdout, stderr) are the files which are automatically opened when C file is executed.

### **7. Compare between array and pointer.**

Array can allocate variables but cannot reallocate those variable if required. Whereas the pointer was assigned to allocate variables and they can also relocate and also are resizable.

### **8. Define function prototype?**

The function prototype is the prototype which depends on the following:

- a. No. of input types
- b. No. of outputs which are to be returned

### **9. Where the function pointers can be used?**

The function pointers can be used when if/switch statements are present, in late binding (variation tables) and to implement call backs activities.

### **10 What do you mean by #include<stdio.h>?**

In C, the hash function # tells the compiler that a statement should be sent to the C preprocessor. The include looks after the new files and replace the contents of those files. and stdio.h will be valid only for the printf, scanf functions.

## **List of Interview questions and answers for C language :**

The C programming language is mother of all programming languages. It is very simple and easy to learn. In interview there are lots of questions asked from this domain so preparation of the topic is very much important. We have prepared a list of 10 questions which is very important and can be asked in any interview.

### **1. What is C Language ?**

**Ans** – C is a general purpose programming language and it was developed by Dennis Ritchie. Programs written in this language are the set of instructions given by a programmer to the computer in high level language. The program execution process consists of two processes, first it uses a compiler to translate the high level program into machine code then execute the instruction set.



Important c questions

### **2. What does static variable mean ?**

**Ans** – Static variable is available to a C application, throughout the life time of the program. At the time of starting the program execution, static variables allocations takes place first. In a scenario where one variable is to be used by all the functions (which is accessed by **main ()** function), then the variable need to be declared as static in a C program.

### **3. What is the difference between calloc() and malloc() ?**

**Ans** – A block of memory may be allocated using the function **malloc()**. The malloc function reserves a block of memory of



specified size and returns a pointer of type **void()**. This means we can assign the **base address** of the block to any type of pointer

**Syntax – P = (cast type\*)malloc(byte size);**

**Calloc()** is also a memory allocation function which is generally used to allocate memory for array and structure. **malloc()** is used to allocate a single block of storage space, **calloc()** allocates multiple blocks of storage, each of same size and initializes them with zero.

**Syntax– P=(cast type\*)calloc(n,array size);**

#### **4. What is a NULL pointer ?**

**Ans –** A NULL pointer is a pointer which is pointing to nothing. It just points the base address of the segment. It means that it will not point to other valid pointer, other variable, array cell or anything else. It will never be compared with anything.

#### **Example :**

- **Integer pointer :** `int *ptr=(char *);`
- **Float Pointer :** `float *ptr=(float *);`
- **Character Pointer :** `char *ptr=(char *);`

#### **5. Advantages of a macro over a function ?**

**Ans –** Actually macro and function are used for different purposes. A macro replaces its expression code physically in the code at the time of preprocessing. But in case of function the control goes to the function while executing the code. So when the code is small then it is better to use macro. But when code is large then function should be used.

#### **6. What is page thrashing ?**

**Ans –** It happens when a high level of paging activity happen. Thrashing is caused by under allocation of minimum number of pages required by a process, forcing it to continuously page fault.

The system can detect thrashing by evaluating the level of CPU utilization as compared to the level of multiprogramming. This problem can be eliminated by reducing the level of multiprogramming.

### **7. How do you override a defined macro?**

**Ans** – You can use the **#undef preprocessor** directive to undefine (override) a previously defined macro. A way of overriding macro is shown below.

```
#ifdef MACRO
#undef MACRO
#endif
#define MACRO X
```

### **8. What are the different storage classes in C ?**

**Ans** – C has three types of storage classes: automatic, static and allocated.

- Variable having block scope and without static specifier have automatic storage duration.
- Variables with block scope, and with static specifier have static scope.
- Global variables (i.e, file scope) with or without the static specifier also have static scope. Memory obtained from calls to **malloc()**, **alloc()** or **realloc()** belongs to storage class.

### **9. When does the compiler not implicitly generate the address of the first element of an array?**

**Ans** – Whenever an array name appears in an expression such as

- array as an operand of the *sizeof* operator.
- array as an operand of "&" operator.
- array as a string literal initializer for a character array.

Then the compiler does not implicitly generate the address of the address of the first element of an array.

### **10. Is using exit() the same as using return ?**

**Ans** – No, The **exit()** function is used to exit from your program and return control to the operating system. The return statement is used to return from a function and return control to the calling function. If you issue a return from the **main()** function, you are essentially returning control to the calling function, which is the operating system. In this case, the **return statement** and **exit()** function are similar.