Cisco Sample Paper

Company   :   Cisco
Date   :
College   :

1) The starting location of an array is 1000. If the array[1..5/...4] is stored
in row major order, what is the location of element [4][3]. Each work occupies
4 bytes.

2) If the number of leaves in a binary tree are N, then the total number of
internal nodes........(Assume complete binary tree)

ANS: N-1

3) The locality of reference means.............

4) If two ausigned 8 bit numbers are multiplied what is the memory space
required...............

5) The vector address of RST 7.5 is ....

ANS: 003C (multiply 7.5 by 8 and convert to hex)

6) int b = 0xAA;
b))4;
printf("%x",b);

What is the output of the above program....

7) struct s1 { struct { struct {int x;}s2}s3}y;

How to access x? ANS: y.s3.s2.x

8) Why there is no recursion in Fortran?

ANS: There is no dynamic allocation

9) What is the worst case complexity of Quick sort?

ANS: O(n^2)

10) Quick sort uses..............

Ans: Divide and conquer

11) In a sequential search, the time it takes to search through n elements is

12) What is the size of the array declared as double * X[5]

ANS: 5* sizeof (double *)

13) A binary search tree is given and asked to write the preorder traversal result.

14) If size of the physical memory is 2^32-1, then the size of virtual memory......

15) S-) A0B
A-) BB|0
B-) AA|1 How many strings of length 5 are possible with the above productions??

16) (3*4096+15*256+3*16+3). How many 1's are there in the binary representation
of the result.

ANS: 10

17) In memory mapped I/O how I/O is accessed.............

ANS: Just like a memory location (Means, I/O devices can be accessed using the instructions like mov A,M etc...)

18) What is the use of ALE in 8085.......

ANS: To latch the lower byte of the address.

19) If the logical memory of 8 X 1024 is mapped into 32 frames, then the number
of bits for the logical address ......

ANS: 13

20) Context free grammar is useful for...

ANS: If-then structures.

21) In ternary number representation, numbers are represented as 0,1,-1. Here
-1 is represented as - (1 bar). Then how is 352/9 represented......
1

22) There are processors which take 4,1,8,1 machine cycles respectively. If these are executed in round robin fashion with a time quantum of 4, what is the
time it take for process 4 to complete....

ANS: 9

23) The minimum frequency of operation is specified for every processor because......

24) In memory mapped I/O, what will happen if a device is identified with a 16
bit address and enabled by memory related control signals.....

25) The reason for preferring CMOS over NMOS is....

Ans: Low power consumption.

26) Two binary numbers A,B are given and asked to find out A-B.

27) Each character is represented by 7 bits, 1 bit is used to represent error
bit and another bit for parity. If total number of bits transmitted is
1200bits, then number of symbols that can be transmitted.......

28) One question about the setassociativity of cache..

29) Write the postfix form of the following expression...

A+[[(B+C)+(D+E)*F]/G]

30) What is the function of the linker......

31) void f(int y)
{
struct s *ptr;

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ptr = malloc (sizeof (struct)+ 99*sizeof(int));
}

struct s{
int i;
float p;
};
```

when free(ptr) is executed, then what will happen??