MOTOROLA PLACEMENT PAPER (TECHNICAL)

**1. bubble sorting is**

a) two stage sorting   
b).....  
c)....   
d) none of the above

**2. c++ supports**

a) pass by value only  
b) pass by name  
c) pass by pointer   
d) pass by value and by reference

**3. Selection sort for a sequence of N elements**no of comparisons = \_\_\_\_\_\_\_\_\_  
no of exchanges = \_\_\_\_\_\_\_\_\_\_\_\_

**4. Insertion sort**no of comparisons = \_\_\_\_\_\_\_\_\_  
no of exchanges = \_\_\_\_\_\_\_\_\_\_\_\_

**5. what is a language?**

a) set of alphabets  
b)set of strings formed from alphabets  
c)............  
d)none of the above

**6. Which is true abt heap sort**a)two method sort  
b)has complexity of O(N2)  
c)complexity of O(N3)  
d)..........

**7. In binary tree which of the following is true**

a) binary tree with even nodes is balanced  
b) every binary tree has a balance tree  
c) every binary tree cant be balanced  
d) binary tree with odd no of nodes can always be balanced

**8. Which of the following is not conducive for linked list implementation of array**

a) binary search  
b) sequential search  
c) selection sort  
d) bubble sort

**9. In c++ ,casting in C is upgraded as**

a)dynamic\_cast  
b)static\_cast  
c)const\_cast  
d)reintrepret\_cast

**10. Which of the following is true abt AOV(Active On Vertex trees)**

a)it is an undirected graph with vertex representing activities and edges representing precedence relations  
b)it is an directed graph "" "" """ "" "" "" "" "" "  
c)........  
d)......

**.11. Question on worst and best case of sequential search**

**12. question on breadth first search**

**13.**char \*p="abcdefghijklmno"  
         then printf("%s",5[p]);

**14. what is the error**

struct { int item; int x;}   
main(){ int y=4; return y;}  
error:absence of semicolon

**15. Which of the following is false regarding protected members**

a)can be accessed by friend functions of the child  
b) can be accessed by friends of child's child  
c)usually unacccessible by friends of class  
d) child has the ability to convert child ptr to base ptr

**16. What is the output of the following**

void main()  
{   
int a=5,b=10;  
int &ref1=a,&ref2=b;  
ref1=ref2;  
++ ref1;  
++ ref2;  
cout<<a<<b<<endl;   
} value of a and b  
a)5 and 12  
b)7 and 10  
c)11 and 11  
d)none of the above

**17. What does this return**

f(int n)  
{  
return n<1?0:n==1?1:f(n-1)+f(n-2)  
}  
hint:this is to generate fibonacci series  
code for finding out whether a string is a palindrome,reversal of linked list, recursive computation of factorial with   
blanks in the case of some variables.we have to fill it out

**18. for eg; for palindrome**

palindrome(char \* inputstring)  
{   
int len=strlen ( ?);  
int start= ?;  
end =inputstring + ?-?;  
for(; ?<end && ?==?;++ ?,--?);  
return(?==?); }  
we have to replace the question marks(?) with corresponding variables

**19. .linked list reversal**

Linked (Link \*h)  
{  
Link \*temp,\*r=0,\*y=h;   
while(y!= ?) (ans:Null)  
{  
temp = ?;(ans:y->next)  
some code here with similar fill in type  
}

**20. fill in the blanks type question involving recursive factorial computation**