1. Name the computers based on their performance.  
2. Differentiate between primary memory and secondary memory.  
3. What is meant by time sharing operating system?  
4. What is the significance of recycle bin?  
5. Define the following:  
   i) Dynamic RAM  
   ii) Parallel Port  
6. Convert the following:  
   i) \((2C9)_{16} = (?)_{10}\)  
   ii) \((3674)_{8} = (?)_{2}\)  
7. Expand CISC.  
8. What are the different types of error that occur during programming? Explain any two.  
9. What are the different stylistic guidelines in program development?  
10. What are the different methods developed for program verification?  
11. Define: (1) Pretty printing  
    (2) Object code.  
12. Mention the different steps you would follow while writing a program.  
13. What do you mean by testing and debugging?  
14. What are the rules to be followed while naming an identifier?  
15. What are the advantages and disadvantages of floating point numbers over integers?  
16. Write the names of the header files to which the following functions belong:  
   (i) `write()`  
   (ii) `strrev()`  
17. Write C++ expression for:  
   \(\text{Result}=2-ye^{2y}\)  
18. How many times will the following loop execute?  
   ```c++
   int sum=0, i=0;
   while(i<=5)  
   {
     sum+=i; i++;
   }
   ```
19. Convert the following conditional statement to if-else.
```cpp
int val, res, n=1000;
cin>>val;
res=(n+val)>1750?400:200;
cout<<res;
```

20. What is the difference between islower() and tolower() functions? Explain with example.

21. Rewrite the following program after removing all the syntax error(s), if any. Underline each correction.
```cpp
#include <iostream.h>
void main( )
{
    int X[3] = {60,50,30,40}, Y, Count = 4;
    cin >> Y;
    for ( i = Count - 1 ; i >= 0; i -- )
        switch( i )
        {case 0 :
        case 2 ; cout<<Y * X[ i ]<<endl; break;
        case 1 :
        case 3 : cout >> Y + X[ i ] ; }
}
```

22. Find the output of the following:

i) #include<iostream.h>
void main()
{
    int i, j, a=10 b=8;
    for(i=0;i<=a;i++);
    cout<i<<" \";,
    for(j=0;j<=b;j++);
    cout<j<<endl;
    b=a;
    --a;
    b--;
    cout<a<<" <<++b;
}

ii) #include<iostream.h>
main()
{
    int a[5]= {15,20,25,30,35};
    int i, j,k=1,m;
    i = a[1] ++;
    j= ++a[2];
m= a[k+1];
cout<i<<j<<k<<m; }

23. Differentiate between local variable and global variable with example.

24. Find the output of the following:
   i) #include<iostream.h>
      int max(int &x, int &y, int z)
      {
         if(x>y && y>z)
         { y++; z++; return x; }
         else
         {
            if(y>x)
               return y;
            else
               return z;
         }
      }
      void main()
      {
         int a=20, b=15,c=10;
         a= max(a,b,c);
         cout<<a<<b<<c;
         b= max(a,b,c);
         cout<<a<<b<<c<<endl;
      }
   
   ii) #include<iostream.h>
       #include<string.h>
       #include<stdio.h>
       #include<ctype.h>
       void main()
       {
          char NAME[ ]="a pRoFiLE";
          for(int x=0;x<strlen(NAME);x++)
          {
             if(islower(NAME[x]))
               NAME[x]=toupper(NAME[x]);
             else
                if(isupper(NAME[x]))
                  if(x%2!=0)
                    NAME[x]=tolower(NAME[x-1]);
                else
                  NAME[x]--;
          }
          cout<<NAME<<endl;
       }
25. Rewrite the following program after removing the syntax error(s) if any. Underline each correction.
#include<iostream.h>
void main()
{
One=10,Two=20;
void Callme(int A=10, int B);
Callme(One;Two);
Callme(Two);
}
void Callme(int Arg1, Arg2)
{
Arg1=Arg1+Arg2;
cout<<Arg1<<Arg2;
}

26. Write a C++ program to find the sum of the series
1+1!+2!+3!+........

27. Write a C++ program to print every integer between 1 and n divisible by m. Also report whether the number that is divisible by m is even or odd.

28. Write a C++ program to divide all those elements of a one dimensional array by 3, which are divisible by 3 and multiply other elements by 7.
Eg. If the array elements are

| 21 | 11 | 33 | 10 | 18 |

The output should be

| 7  | 77 | 11 | 42 | 6  |

29. Write a C++ program to find the sum of both diagonal elements of a square matrix.

30. Write a C++ program to count the number of occurrences of a given character in a string.

31. Write a function to swap two numbers to swap two numbers using call by value. Write the main to invoke this function.

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