

## Sample Test Paper :Alter Engineering

- ```
int b=10;
int *p=&b;
*p++;
printf("%d",*p);
```

what is the output?
- What is the difference between malloc, calloc and realloc?
- What does malloc return in C and C++?
- ```
main()
{
char *a="hello";
char *b="bye";
char *c="hai";
int x=10,y=100;
c=(x<y)?a:b;
printf("%s",c);
}
```

whats the output?
- ```
void main()
{
int a,b;
a=sumdig(123);
b=sumdig(123);
printf("%d %d",a,b);
}
int sumdig(int n)
{
static int sum;
int d;
if(n!=0)
{
d=n%10;
n=(n-d)/10;
sum=sum+d;
sumdig(n);
}
else
return s;
}
```

what is the output?
- Declare a pointer to a function that takes a char pointer as argument and returns a void pointer.
- How do we open a binary file in Read/Write mode in C?

### C++

- ```
class A
{
public:
A()
{
}
~A();
};
class derived:public A
{
derived();
};
```

what is wrong with this type of declaration?
- what do you mean by exception handling?
- What are "pure virtual" functions?
- What is the difference between member functions and static member functions?

12. What is the difference between delete[] and delete?
13. Question on Copy constructor.
14. What are namespaces?
15. One question on namespace.
16. What are pass by value and pass by reference?  
what is the disadvantage of pass by value?  
I didn't get this. if you have the answer plz tell me.
17. How to invoke a C function using a C++ program?
18. 

```
char *str;  
char *str1="Hello World";  
scanf(str1,"%s",str);
```

  
what is the output?
19. Difference between function overloading and function overriding.
20. There is a base class sub, with a member function fsub(). There are two classes super1 and super2 which are subclasses of the base class sub. if and pointer object is created of the class sub which points to any of the two classes super1 and super2, if fsub() is called which one will be invoked?