

## TechMahindra(MBT) Paper Technical - C & C++

```
C-Test Paper
1.#include
* What is wrong in the following problem

main() {
int i,j;
j=10;
i=j+- j++;
printf("%d\n,i,j);
}
ans: 0, 12

2.#include * What is the output of the following problem
main() {
int j;
for(j=0;j<3;j++)
foo();
}
foo() {
static int i=10;
i+=10;
printf("%d\n,i);
}

/* Out put is (**since static int is used i value is retained between
* 20 function calls )
* 30
* 40
*/

3.#include #include #include /* This is asked in PCS Bombay walk-in-interview
* What is wrong in the following code
*/
main()
{
char *c;
c = Hello;
printf("%s\n, c);
}
/*ans:- Hello, The code is successfully running */

4.#include /* This problem is given in PCS BOMBAY walk-in-interview.
* What is the final value of i and how many times loop is
* Executed ?
*/

main()
{
int i,j,k,l,k=0;
/* the input is given as 1234 567 */
printf(Enter the number string:<1234 567 \n);
scanf("%d%d%d%d",&i,&j,&k,&l);
for(k;k--;i++)
for(l=0;l<=i;l++)
printf("%d\n,i,l);
printf(LOOPS= %d\n, k-1);
}
/* Ans: i = 16, and loop is executed for 169 times */

5.#include /* This is given in PCS Bombay walk-in-interview */
/* What is the output of the following program */

main() {
union {
int a;
int b;
int c;
} u,v;
u.a = 10;
u.b = 20;
printf("%d\n,u.a,u.b);
}
/* Ans : The latest value assigned to any of the union member
will be present in the union members so answer is
20 20
*/
6.#include main()
{
float i,j;
scanf("%f%f",&i,&j);
printf("%.2f%.3f,i,j);
}

/Ans:- 123.34 3. 234 */

7.#include /* This is given in PCS Bombay walk-in-interview
* What is the out put of the following problem ?
*/

main()
{
char *str = 12345;
printf("%c %c %c\n, *str, *(str++), *(str++));
}
/* Ans: It is not 1 2 3
* But it is 3 2 1 Why??
*/

8.#include /* This problem is asked in PCS Bombay Walk-in-interview
* Write a macro statement to find maximum of a,b
*/
#define max(a,b) (a)>b?a:b
main()
{
int a,b;
a=3;
b=4;
printf("%d,max(a,b));
}
/* Ans is very simple the coding is just for testing it
and output is 4 */

~
9.#include /* This problem is asked in PCS Bombay
* What is the output of the following coding
*/

main()
{
int len=4;
char *st="12345678;
st = st - len;
printf("%c\n,*st);
}
/* Ans : It will print some junk value */

~
10.#include main()
{
func(1);
}
func(int i){
static char *str = { One,Two,Three,Four};
printf("%s\n,str[i++]);
return;
}
/* Ans:- it will give warning because str is pointer to the char but
it is initialized with more values
if it is not considered then the answer is Two */

11.
#include main()
{
int i;
for (i=1;i<100; i++)
printf("%d %0x\n,i);
}
/* Ans:- i is from 1 to 99 for the first format,
for the second format 1to9, ato f, 10 to 19,1ato1f, 20 to 29, etc */

12.#include /* This problem is asked in PCS Bombay walk-in-interview
* In the following code please write the syntax for
* assing a value of 10 to field x of s and id_no 101 of s
*/
struct {
int x;
int y;
union {
int id_no;
char *name;
}b;
}s,*st;
main()
{
st = &s;
st-x=10;
st-b.id_no = 101;
printf("%d\n,s.x,s.b.id_no);
}
/* Ans: The answer is st-x=10;
* st-b.id_no=101;
*/

13.#include /* This problem was asked in PCS Bombay in a walk-in-interview
* Write a recursive function that calculates
* n * (n-1) * (n-2) * ..... 2 * 1
*/

main() {
int factoria(int n);
int i,ans;
printf(n Enter a Number);
scanf("%d,&i);
ans = factoria(i);
printf("nFactorial by recursion = %d\n, ans);
}
int factoria(int n)
{
if (n <= 1) return (1);
else
return ( n * factoria(n-1));
}

~
14.#include /* This problem is asked in PCS Bombay walk-in-interview
* What is the output of the following problem
*/
main(){
int j,ans;
j = 4;
ans = count(4);
printf("%d\n,ans);
}
int count(int i)
{
if ( i < 0) return(0);
else
return( count(i-2) + count(i-1));
}

/* It is showing -18 as an answer */

15.#includemain()
{
int i=4;
if(i=0)
printf(statement 1);
else
printf(statement 2);
}
/* statement 2 */
```

This is pesb paper.

```
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* What is the output of the following coding
*/

main()
{
int len=4;
char *st="12345678;
for(i=0; i<6; i++)
st = st - len;
printf("%c\n,*st);
}
/* Ans : It will print some junk value */

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func(1);
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main(){
int j,ans;
j = 4;
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printf("%d\n,ans);
}
int count(int i)
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if ( i < 0) return(0);
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return( count(i-2) + count(i-1));
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