

## Sample Test Paper

```
1. #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,lc=0;
/* the input is given as 1234 567 */
printf("Enter the number string: <1234 567 > \n");
scanf("%2d%d%1d",&i,&j,&k);
for(;k;k--,i++)
for(l=0;l> printf("%d %d\n",i,l);}
printf("LOOPS= %d\n", lc-1);
}
/* Ans: i = 17, and loop is executed for 169 times */
```

```
2. #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 */
```

```
3. #include
```

```
main()
```

```
{
int i;
for (i=1;i<100; i++)
printf("%d %0x\n",i,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 */
```

```
4. #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 factorial(int n);
int i,ans;
printf("\n Enter a Number:");
scanf("%d",&i);
ans = factorial(i);
printf("\nFactorial by recursion = %d\n", ans);
```

```

}
int factorial(int n)
{
if (n <= 1) return (1);
else
return ( n * factorial(n-1));
}
5.    #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(i);
else
return( count(i-2) + count(i-1));
}

/* It is showing -18 as an answer */
6.    #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,lc=0;
/* the input is given as 1234 567 */
printf("Enter the number string: <1234 567 > \n");
scanf("%2d%d%1d",&i,&j,&k);
for(;k;k--,i++)
for(l=0;l> printf("%d %d\n",i,l);}
printf("LOOPS= %d\n", lc-1);
}
/* Ans: i = 16, and loop is executed for 169 times */

```