

1.

```
#include <stdio.h>
void fun();
int main( void )
{
    fun();
    return 0;
}
void fun()
{
    #ifndef value
        #define value 100
    #undef value
    #else
        #undef value
        #define value 200
    #endif
    #define Value 300 printf("Value : %d",Value);
    return ;
}
```

- A. Value : 100
- B. Value : 200
- C. no output
- D. Compile time error
- E. Value : 300

Answer: C

2.

```
#include<stdio.h>
#line 100
int main( void )
{
    printf("\n line = %d ",__LINE__ );
    #line 0
    printf(" line = %d ",__LINE__ );
    #line 100
    printf(" line = %d ",__LINE__ );
    return 0;
}
```

## Preprocessor Directives

### Dynamic Memory Allocation



**SUNBEAM**  
Exploring New Ideas Reaching New Heights

- A. run time error
- B. compile time error
- C. line = 102   line = 0   line = 100
- D. line = 103   line = 0   line = 102

Answer: C

3.

```
#include<stdio.h>
#include<string.h>
int main( void )
{
    #define SUNBEAM "SUNBEAM IT PARK \n"
    #define Sunbeam "SUNBEAM MARKETYARD\n"
    #ifdef SUNBEAM
        printf(SUNBEAM);
    #endif
    #ifdef SUNBEAM
        printf(Sunbeam);
    #endif
    printf("\'Sunbeam\' \n");
    printf("\"SUNBEAM\" \n");
    return 0;
}
```

- A. SUNBEAM IT PARK
- B. SUNBEAM IT PARK  
SUNBEAM MARKETYARD  
Sunbeam  
SUNBEAM
- C. SUNBEAM IT PARK  
SUNBEAM MARKETYARD  
'Sunbeam'  
"SUNBEAM"
- D. SUNBEAM MARKETYARD

Answer: C

3.

```
#include<stdio.h>
#define A(x)((x)*(x))
int main( void )
{
    int a, b=3;
    a = 75 / (b* A((b+2)));
    printf("%d\n", a);
    return 0;
}
```

- A. 1
- B. 625
- C. 75
- D. 225

Answer: A

4.

```
#include <stdio.h>
#define MACRO(n, i, a, m) m##a##i##n
#define MAIN MACRO(n, i, a, m)

#define SUNMEAM sunbeam
int MAIN(void )
{
    printf("\\"SUNBEAM\\"");
    return 0;
}
```

- A. "SUNBEAM"
- B. SUNBEAM
- C. sunbeam
- D. compile time error

Answer: A

5.

```
#include<stdio.h>
#define SWAP(a, b) {b ^= b; a ^= a; b ^= b ;}
int main( void )
{
    int x = 10;
    int y = 20;
    x=x*y; y=x/y; x=x/y;
    SWAP(x, y);
    x=x+y; y=x-y; x=x-y;
    printf("X=%d,Y=%d",x,y);
    return 0;
}
```

- A. X=0,Y=0
- B. X=10,Y=20
- C. X=20,Y=10
- D. Compile time error

Answer: A

6.

```
#include<stdio.h>
#define exp(a) a+a * 5 / a*a
int main( void )
{
    int x = exp(3+2) * 5;
    printf("Value of X=%d",x);
    return 0;
}
```

- A. Value of X=27
- B. Value of X=32
- C. Value of X=20
- D. compile time error

Answer: A

7.

```
#include<stdio.h>
#define int char
int main( void )
{
    int* i = 65, j=56;
    printf("sizeof(i)=%d sizeof(j)=%d",sizeof(i),sizeof(j));
    return 0;
}
```

- A. sizeof(i)=8 sizeof(j)=1
- B. sizeof(i)=4 sizeof(j)=1
- C. sizeof(i)=8 sizeof(j)=8
- D. sizeof(i)=4 sizeof(j)=4

Answer: B

8.

```
#include <stdio.h>
#define INCREMENT(x) --x
#define DECREMENT(x) ++x
int main( void )
{
    char *ptr = "SunbeamKarad";
    int x = 10;
    printf("%s", DECREMENT(ptr));
    printf("%3d\t", DECREMENT(x));
    printf("%s", INCREMENT(ptr));
    printf("%3d", INCREMENT(x));
    return 0;
}
```

- A. unbeamKarad 11      SunbeamKarad 10
- B. SunbeamKarad 11      unbeamKarad 10
- C. garbage value SunbeamKarad 11      SunbeamKarad 10
- D. garbagevalue SunbeamKarad 9      SunbeamKarad 10

Answer: A

9.

```
#include<stdio.h>
#define f1(para1,para2) para1##para2
#define f2(para2,para1) para1##para2
int main(void)
{
    char var_='A';
    printf("%c ",++f1(var,_));
    printf(" %d",--f2(_,var));
    return 0;
}
```

- A. B 65
- B. A 65
- C. B 66
- D. B 65

Answer: A

10.

```
#include<stdio.h>
#include<string.h>
int main(void)
{
    char joining1[10]="",joining2[10]="",joining3[10]="";
    strcat(joining1,"TIME");
    strcat( joining1,"_"); strcat( joining1,"_");
    strcat( joining3,joining1);
    strcat( joining2,"_"); strcat( joining2,"_");
    strcpy( joining1,joining2);
    strcat( joining1,joining3);
    printf("\n time= %s", joining1);
    return 0;
}
```

- A. time= \_\_TIME\_\_
- b. time= current time will print
- c. compile time error
- D. run time error

Answer: A

11.

```
#include<stdio.h>
#include<stdlib.h>
int main ( void )
{
    char *title=NULL;
    title = (char *) malloc(15);
    strcpy(title, "C Programming");
    printf("String = %c", *title);
    free(title); title=0;
    strcpy(title, "C++");
    printf(" %s", title);
    return 0;
}
```

- A. String = C Programming
- B. Compile time error
- C. String = C C++
- D. exit value -1

Answer: D

12.

```
#include<stdio.h>
#include<stdlib.h>
int main(void)
{
    char *ptr=NULL;
    ptr = (char *)calloc(20,sizeof(char));
    printf("%d bytes\n", sizeof(ptr));
    free(ptr); ptr=NULL;
    return 0;
}
```

- A. 4 bytes
- B. 1 bytes
- C. 8 bytes
- D. 20 bytes

Answer: A

13.

```
#include<stdio.h>
#include<stdlib.h>
int main(void)
{
    char *ptr=NULL;
    ptr = (char *)calloc(1,10);
    strcpy(ptr, "Sunbeam");
    ptr = (char *)realloc(ptr,20);
    strcat(ptr, " IT PARK");
    printf("%c",
    (ptr[0]>=65 && ptr[0]<=90)? ptr[14]+32 : ptr[0]-32);
    free(ptr);
    ptr=NULL;
    return 0;
}
```

- A. K
- B. k
- C. s
- D. S

Answer: B

14.

```
#include<stdio.h>
#include<stdlib.h>
int main(void)
{
    char *ptr=NULL;
    strcpy(ptr , "Demo1");
    strcpy(ptr , "Demo2");
    free(ptr);
    printf("%s\n",ptr);
    return 0;
}
```



- A. Demo1
- B. Demo2
- C. Demo1Demo2
- D. exit value -1

Answer: D

15.

what type of data u can store in this block of memory?

```
#include<stdio.h>
#include<stdlib.h>
int main(void)
{
    void *ptr=NULL;
    ptr = malloc(10);
    return 0;
}
```

- A. int
- B. char
- C. float
- D. all of above data types

Answer: D

16.

Which of the above three functions are likely to cause problems with pointers?

```
int * fun1 (void)
{
    int x= 10;
    return (&x);
}
int * fun2 (void)
{
    int * px;
    *px= 10;
    return px;
}
```

```
int *fun3 (void)
{
    int *px;
    px = (int *) malloc (sizeof(int));
    *px= 10;
    return px;
}
```

- A. function fun1 and fun2
- B. function fun2 and fun3
- C. function fun1 , fun2 and fun3
- D. function fun3

Answer: A