

1. What does the following program print?

```
#include <stdio.h>
int sum,count;
void main(void)
{< BR>                                for(count=5;sum+=--count;)
  printf("%d",sum);
}
```

- a. The pgm goes to an infinite loop
4791001974
d. Prints 5802112085
- b. Prints 4791010974
c. Prints
e. Not sure

2. What is the output of the following program?

```
#include <stdio.h>
void main(void)
{
  int i;< BR>                                for(i=2;i<=7;i++)
  printf("%5d",fno());
}
fno()
{
  staticintf1=1,f2=1,f3;
  return(f3=f1+f2,f1=f2,f2=f3);
}
```

- a. produce syntax errors
will be displayed
d. none of the above
- b. 2 3 5 8 13 21 will be displayed
c. 2 2 2 2 2
e. Not sure

3. What is the output of the following program?

```
#include <stdio.h>
void main (void)
{
  int x = 0x1234;
  int y = 0x5678;
  x = x & 0x5678;
  y = y | 0x1234;
  x = x^y;
  printf("%x\t",x);
  x = x | 0x5678;
  y = y & 0x1234;
  y = y^x;
  printf("%x\t",y);
}
```

- a. bbb3 bbb7
d. 4448 444c
- b. bbb7 bbb3
c. 444c 4448
e. Not sure

4. What does the following program print?

```
#include <stdio.h>
void main (void)
{
```

```

int x;
x = 0;
if (x==0)
printf ("Value of x is 0");
else
printf ("Value of x is not 0");
}

```

- a. print value of x is 0 b. print value of x is not 0 c. does not print anything
on the screen
d. there is a syntax error in the if statement e. Not sure

5. What is the output of the following program?

```

#include <stdio.h>
#include <string.h>
int foo(char *);
void main (void)
{
    char arr[100] = {"Welcome to Mistral"};
    foo (arr);
}
foo (char *x)
{
    printf ("%d\t",strlen (x));
    printf ("%d\t",sizeof(x));
    return0;
}

```

- a. 100 100 b. 18 100 c. 18 18 d. 18 2 e.
Not sure

6. What is the output of the following program?

```

#include <stdio.h>
display()
{
    printf ("\n Hello World");
    return 0;
}
void main (void)
{
    int (* func_ptr) ();
    func_ptr = display;
    printf ("\n %u",func_ptr);
    (* func_ptr) ();
}

```

- a. it prints the address of the function display and prints Hello World on the screen
b. it prints Hello World two times on the screen
c. it prints only the address of the fuction display on the screen
d. there is an error in the program e. Not sure

7. What is the output of the following program?

```

#include <stdio.h>

```

```

void main (void)
{
    int i = 0;
    char ch = 'A';
    do
        putchar (ch);
    while(i++ < 5 || ++ch <= 'F');
}

```

- a. ABCDEF will be displayed
will displayed
c. character 'A' will be displayed infinitely
- b. AAAAAABCDEF
d. none
e. Not sure

8. What is the output of the following program?

```

#include <stdio.h>
#define sum (a,b,c) a+b+c
#define avg (a,b,c) sum(a,b,c)/3
#define geq (a,b,c) avg(a,b,c) >= 60
#define lee (a,b,c) avg(a,b,c) <= 60
#define des (a,b,c,d) (d==1 ?geq(a,b,c):lee(a,b,c))
void main (void)
{
    int num = 70;
    char ch = '0';
    float f = 2.0;
    if des(num,ch,f,0) puts ("lee..");
    else puts("geq...");
}

```

- a. syntax error
displayed
d. none
- b. geq... will be displayed
e. Not sure
- c. lee.. will be

9. Which of the following statement is correct?

- a. sizeof('*') is equal to sizeof(int)
to sizeof(char)
c. sizeof('*') is equal to sizeof(double)
- b. sizeof('*') is equal
d. none
e. Not sure

10. What does the following program print?

```

#include <stdio.h>
char *rev(int val);
void main(void)
{
    extern char dec[];
    printf ("%c", *rev);
}
char *rev (int val)
{
    char dec[]="abcde";
    return dec;
}

```

- a. prints abcde
- b. prints the address of the

array dec

c. prints garbage, address of the local variable should not returned

d. print a

e.

Not sure

11. What does the following program print?

```
void main(void)
{
    int i;
    static int k;
    if(k==' 0' )
        printf("one");
    else if(k== 48)
        printf("two");
    else
        printf("three");
}
```

a. prints one

b. prints two

c. prints three

d. prints one three

e. Not sure

12. What does the following program print?

```
#include<stdio.h>
void main(void)
{
    enum sub
    {
        chemistry, maths, physics
    };
    struct result
    {
        char name[30];
        enum sub sc;
    };
    struct result my_res;
    strcpy (my_res.name,"Patrick");
    my_res.sc=physics;
    printf("name: %s\n",my_res.name);
    printf("pass in subject: %d\n",my_res.sc);
}
```

a. name: Patrick

b. name: Patrick

c. name: Patrick

pass in subject: 2

pass in subject:3

pass in subject:0

d. gives compilation errors

e. Not sure

13. What does

printf("%s",_FILE_); and printf("%d",_LINE_); do?

a. the first printf prints the name of the file and the second printf prints the line no: of the second printf in the file

b. _FILE_ and _LINE_ are not valid parameters to printf function

c. linker errors will be generated

d. compiler errors will be generated

e. Not sure

14. What is the output of the following program?

```
#include <stdio.h>
void swap (int x, int y, int t)
{
    t = x;
    x = y;
    y = t;
    printf ("x inside swap: %d\t y inside swap : %d\n",x,y);
}
void main(void)
{
    int x;
    int y;
    int t;
    x = 99;
    y = 100;
    swap (x,y,t);
    printf ("x inside main:%d\t y inside main: %d",x,y);
}
```

- a. x inside swap : 100 y inside swap : 99 x inside main : 100 y inside main : 99
- b. x inside swap : 100 y inside swap : 99 x inside main : 99 y inside main : 100
- c. x inside swap : 99 y inside swap : 100 x inside main : 99 y inside main : 100
- d. x inside swap : 99 y inside swap : 100 x inside main : 100 y inside main : 99
- e. Not sure

15. Consider the following statements:

i) " while loop " is top tested loop

ii) " for loop " is bottom tested loop

iii) " do - while loop " is top tested loop

iv) " while loop " and "do - while loop " are

top tested loops.

Which among the above statements are false?

- a. i only
- b. i & ii
- c. iii & i
- d. ii, iii & iv
- e. Not sure

16. Consider the following piece of code:

```
char *p = "MISTRAL";
printf ("%c\t", *(++p));
p -=1;
printf ("%c\t", *(p++));
```

Now, what does the two printf' s display?

- a. M M
- b. M I
- c. I M
- d. M S
- e. Not sure

17. What does the following program print?

```
#include <stdio.h>
struct my_struct
{
    int p:1;
    int q:1;
    int r:6;
```

```

    int s:2;
};
struct my_struct bigstruct;
struct my_struct1
{
    char m:1;
};
struct my_struct1 small_struct;
void main (void)
{
    printf ("%d %d\n",sizeof (bigstruct),sizeof (small_struct));
}

```

- a. 10 1 b. 2 2 c. 2 1 d. 1 1 e. Not sure

18. Consider the following piece of code:

```

FILE *fp;
fp = fopen("myfile.dat","r");

```

Now fp points to

- a. the first character in the file.
b. a structure which contains a char pointer which points to the first character in the file.
c. the name of the file. d. none of the above. e. Not

sure.

19. What does the following program print?

```

#include <stdio.h>
#define SQR (x) (x*x)
void main(void)
{
    int a,b=3;
    a = SQR (b+2);
}

```

- a. 25 b. 11 c. 17 d. 21 e.
Not sure.

20. What does the declaration do?

```

int (*mist) (void *, void *);

```

- a. declares mist as a function that takes two void * arguments and returns a pointer to an int.
b. declares mist as a pointer to a function that has two void * arguments and returns an int.
c. declares mist as a function that takes two void * arguments and returns an int.
d. there is a syntax error in the declaration. e. Not sure.

21. What does the following program print?

```

#include <stdio.h>
void main (void)
{
    int mat [5][5],i,j;
    int *p;
    p = & mat [0][0];
    for (i=0;i<5;i++)

```

```

        for (j=0;j<5;j++)
            mat[i][j] = i+j;
        printf ("%d\t", sizeof(mat)); < BR>
        printf( "%d", *(p+i+j));
    }

```

- a. 25 9 b. 25 5 c. 50 9 d. 50 5 e. Not sure

22. What is the output of the following program?

```

#include <stdio.h>
void main (void)
{
    short x = 0x3333;
    short y = 0x4321;
    long z = x;
    z = z << 16;
    z = z | y;
    printf("%01x\t",z);
    z = y;
    z = z >> 16;
    z = z | x;
    printf("%01x\t",z);
    z = x;
    y = x && y;
    z = y;
    printf("%01x\t",z);
}

```

- a. 43213333 3333 1 b. 33334321 4321 4321 c. 33334321
 3333 1
 d. 43213333 4321 4321 e. Not sure

23. What is the output of the following program?

```

#include <stdio.h>
void main (void)
{
    char *p = "Bangalore";
    #if 0
        printf ("%s", p);
    #endif
}

```

- a. syntax error #if cannot be used inside main function b. prints Bangalore on the screen
 c. does not print anything on the screen
 d. program gives an error "undefined symbol if" e. Not sure

24. If x is declared as an integer, y is declared as float, consider the following expression:

```
y = *(float *)&x;
```

Which one of the following statments is true?

- a. the program containing the expression produces compilation errors;
 b. the program containing the expression produces runtime errors;

- c. the program containing the expression compiles and runs without any errors;
- d. none of the above
- e. Not sure

25. What is the return type of calloc function?

- a. int *
- b. void *
- c. no return type: return type is void
- d. int
- e. Not sure