

Full Marks: 50 Marks
Pass Marks: 20 Marks

1) What is the output of the following code?

```
#include <stdio.h>
int main() {
    int x, y = 6, z = 6;
    x = y == z;
    printf("%d", x);
    return 0;
}
```

- A) 0
- B) 1
- C) 6
- D) compiler error

2) What is the output of the following program?

```
#include <stdio.h>
void main() {
    int a=5, b=6;
    int result1 = a|b;
    int result2 = a&b;
    printf("%d and %d",result2,result1);
}
```

- A) 5 and 6
- B) 7 and 4
- C) 4 and 7
- D) compile error

3) What is the output of the following program?

```
#include <stdio.h>
int f(int a, int b){
    return a*2 + b%5;
}
void main() {
    int a=5, b=7;
    printf("%d",f(a,b));
}
```

```
}
```

- A) 12
 - B) 10
 - C) 5
 - D) compile error
- 4) Which of the following declarations is not supported by the C language?
- A) String str;
 - B) char *str;
 - C) float str = 3e2;
 - D) Both "String str;" and "float str = 3e2;"
- 5) What is the result of logical or relational expression in C?
- a) True or False
 - b) 0 or 1
 - c) 0 if an expression is false and any positive number if an expression is true
 - d) None of the mentioned
- 6) What is the sizeof(char) in a 32-bit C compiler?
- a) 1 bit
 - b) 2 bits
 - c) 1 Byte
 - d) 2 Bytes
- 7) What is the output of the following code?

```
#include <stdio.h>
int main(){
    int i=10;
    printf("%d",i++);
    return 0;
}
```

- a) 10
- b) 11
- c) 12
- d) Error

8) What is the output of the following program?

```
#include <stdio.h>
int main()
{
    int y = 10000;
    int y = 34;
    printf("Hello World! %d\n",
y);
    return 0;
}
```

- a) Hello World! 34
- b) Hello World! 10000
- c) Compile Time Error
- d) 34

9) What is the output of the following program?

```
#include <stdio.h>
void main()
{
    int x = 5 * 9 / 3 +
9;
}
```

- a) 24
- b) 3.75
- c) 3
- d) 19

10) What is the output of d, a, b?

```
#include <stdio.h>
//Program 1
int main()
{
```

```
int d, a = 1, b = 2;  
d = a++ + ++b;  
printf("%d, %d, %d", d, a,  
b);  
}
```

- a) 5,2,3
- b) 4,2,3
- c) 4,1,3
- d) Error

11) Which is the correct format specifier for double type value in C?

- a) %LD
- b) %ld
- c) %lf
- d) %LF

13) Increment (++) and decrement (--) are the ____ operators in C?

- a) Unary
- b) Binary
- c) Ternary
- d) None of the above

14) Which is the correct format specifier for long long int?

- a) %llf
- b) %ld
- c) %LLD
- d) %lld

15) How many bytes does float take?

- a) 8 bytes
- b) 10 bytes
- c) 1 byte
- d) 4 bytes

16) Which is the correct way for initializing an array of char?

- a) Char array[] ="Sita";

- b) `char array[]= 'Sita';`
- c) `char array[10] = "Sita";`
- d) `char array="Sita";`

17) What is the output of the program?

```
#include <stdio.h>
#include <stdbool.h>
int main() {
    while (true) {
        printf("Ram");
    }
    return 0;
}
```

- a) Ram
- b) Compile error
- c) Ram is printed unlimited number of times
- d) None of the above

18) Processor Directive in C language starts with?

- a) \$ symbol (Dollar)
- b) @ symbol (at the rate)
- c) & symbol (ampersand)
- d) # symbol (hash)

19) What is the output of the program?

```
#include <stdio.h>
int main()
{
    short i;
    for (i = 1; i >= 0; i++)
        printf("%d\n", i);
}
```

- a) The control won't fall into the for loop
- b) Numbers will be displayed until the signed limit of short and throw a runtime error
- c) Numbers will be displayed until the signed limit of short and program will successfully terminate
- d) This program will get into an infinite loop and keep printing numbers with no errors

21) What is the output of the following program?

```
#include <stdio.h>
float isOdd(int n){
    if(n%2==1){
        return 1;
    }else{
        return 0;
    }
}
void main() {
    printf("%f",isOdd(7));
}
```

- a) true
- b) 1

- c) 1.000000
- d) None

21) What is the purpose of a function prototype in C language?

- a) To declare the function name and its return type.
- b) To define the implementation of a function.
- c) To declare the return type of the function.
- d) To declare the function name, its parameter types and return type.

22) What is the difference between call by value and call by reference in C language?

- e) Call by value passes the address of the argument to the function, while call by reference passes a copy of the argument value.
- f) Call by value passes a copy of the argument value to the function, while call by reference passes a reference to the argument variable.
- g) Call by value and call by reference are the same thing.
- h) Call by value passes a reference to the argument variable, while call by reference passes a copy of the argument value.

23) Which of the following is true about recursive functions in C language?

- a) A recursive function cannot call itself.
- b) A recursive function must have a base case to terminate the recursion.
- c) A recursive function must have a return type of void.
- d) A recursive function cannot be called from another function.

24) Which of the following is true about function arguments in C language?

- a) Function arguments are always passed by value.
- b) Function arguments are always passed by reference.
- c) Function arguments can be passed by value or by reference.
- d) Function arguments can be passed by value, but not by reference

25) What is the output of the following program?

```
#include <stdio.h>
void funct(int *a){
    *a= *a * 5;
    printf("**a=%d ",*a);
}
int main(){
    int a=6;
    funct(&a);
    printf("a=%d ",a);
```

```
}
```

- a) $a=30$ $*a=30$
- b) $a=6$ $*a=6$
- c) $a=6$ $*a=30$
- d) $a=30$, $*a=6$

26) What is the output of the following program?

```
#include <stdio.h>
void funct(int a){
    a = a*6;
    printf("a in funct is %d,",a);
}
int main(){
    int a=6;
    funct(a);
    printf("a in main function is %d ",a);
    return 0;
}
```

- a) a in funct is 6,a in main function is 6
- b) a in funct is 36,a in main function is 36
- c) a in funct is 36,a in main function is 10
- d) a in funct is 36,a in main function is 6

27) What is the output of the following program?

```
#include <stdio.h>
int funct(int a){
    a = a*6;
    printf("a in funct is %d,",a);
    return a;
}
int main(){
    int a=6;
    a = funct(a);
    printf("a in main function is %d
",a);
    return 0;
}
```

- a) a in funct is 6,a in main function is 6

- b) a in funct is 36,a in main function is 36
- c) a in funct is 36,a in main function is 10
- d) a in funct is 36,a in main function is 6

28) Which of the following is a correct format for declaration of function?

- a) return-type function-name(argument type);
- b) return-type function-name(argument type){}
- c) return-type (argument type)function-name;
- d) all of the mentioned

29) The value obtained in the function is given back to main by using _____ keyword.

- a) static
- b) return
- c) new
- d) volatile

30) What will be the value of x?

```
#include <stdio.h>
void solve() {
    int x = printf("Shyam");
    printf(" %d", x);
}
int main() {
    solve();
    return 0;
}
```

- a) Shyam 5
- b) 5
- c) Shyam 1
- d) 0

31) What will be the value of a and b?

```
#include <stdio.h>
void swap(int *a, int *b) {
    int t = *a;
    *a = *b;
    *b = t;
}
```

```
void function() {
    int a = 3, b = 5;
    swap(&a, &b);
    printf("%d %d", a, b);
}
int main() {
    function();
    return 0;
}
```

- a) 3 5
- b) 5 3
- c) 5 5
- d) 3 3

32) What will be the value of a?

```
#include <stdio.h>
void function() {
    char ch[10] =
"abcdefghij";
    int a= 0;
    for(int i = 0; i < 10; i++) {
        a += (ch[i] - 'a');
    }
    printf("%d", a);
}
int main() {
    function();
    return 0;
}
```

- a) 100
- b) 36
- c) 45
- d) 20

33) What will be the output of the program?

```

#include <stdio.h>
void function() {
    int first = 10, second =
20;
    int third = first + second;
    {
        int third = second -
first;
        printf("%d ", third);
    }
    printf("%d", third);
}
int main() {
    Function();
    return 0;
}

```

- a) 10 20
- b) 30 10
- c) 10 20
- d) Compilation error

34) What will be the output of the program?

```

#include <stdio.h>
void function() {
    int a = 3;
    int res = a++ + ++a + a++ + ++a;
    printf("%d", res);
}
int main() {
    function();
    return 0;
}

```

- a) 12
- b) 20
- c) 21
- d) 24

35) What is the correct way to write actual parameters?

- a) Int sum=sumofnum(a,b);
- b) int sum = sumofnum(int a,int b);

- c) int sum = sumofnum(a, b);
- d) none

36) What is the output of the following program?

```
#include <stdio.h>
int main() {
    char str1[30]="Harry";
    char str2[30];
    str2 = str1;
    printf("%s",str2);
}
```

- a) Harry
- b) None
- c) 6fdc00
- d) Error occurred

37) What is the output of the following program?

```
#include <stdio.h>
void main() {
    int a[3] = {5};
    int i;
    for(i=0;i<3;i++){
        printf("%d",a[i]);
    }
}
```

- a) 555
- b) 500
- c) 5(garbage)(garbage)
- d) (garbage)(garbage)5

38) What is the output of the following program?

```
#include <stdio.h>
int *p;
int main()
{
    int i = 5;
    p = &i;
```

```
printf("%d, %x, %d",i,p,*p);  
return 0;  
}
```

- a) 5, 62fe1c, 5
- b) 5, 433455, 5
- c) 5, 5, 433455
- d) 5, 5, 5

39) What is the output of the following program?

```
#include <stdio.h>  
int main()  
{  
    int a[5] = {11,22,33,44,55};  
    int *p;  
    p = &a[0];  
    p++;  
    printf("%d, %d",*p,*(p+1));  
    return 0;  
}
```

- a) 11, 22
- b) 22, 33
- c) 11, 33
- d) 22, 44

40) In c programming, sizeof() function returns:

- a) The length of an array in integer
- b) The bytes size required to allocate in memory
- c) The array values one by one
- d) None of the above

41) An array in C cannot be initialized by which of the following statements?

- a) char a[]= "Hello";
- b) char a[6]= {};
- c) char a[6]= {0};
- d) char a[6];

a= "Hello";

42) What is the output of the following program?

```
#include <stdio.h>
int main(){
    int A[5]= {1,2,3,4,5};

    printf("%d",sizeof(A)/sizeof(A[0]));
}
```

- a) 6
- b) 5
- c) 0
- d) 1

43) Array is passed into the function using pass by _____.

- a) reference
- b) value
- c) both
- d) none of the above

44) What is the output of the following program?

```
#include <stdio.h>
int main(){
    int A[5]= {1,2,3,4,5};
    int *p;
    p= A;
    printf("%d",*(p+1));
    return 0;
}
```

- a) 1

- b) 3
- c) 2
- d) 5

45) How to find the length of an array in C?

- a) sizeof(a[0])
- b) sizeof(a)/sizeof(a[0])
- c) sizeof(a)*sizeof(a[0])
- d) sizeof(a)

46) How to initialize a list of strings in an array?

- a) Char [5][20]={“ram”, “shyam”, “hari”, “sita”, “gaury”};
- b) char array[20][5]={“ram”, “shyam”, “hari”, “sita”, “gaury”};
- c) char array[5][20]={“ram”, “shyam”, “hari”, “sita”, “gaury”};
- d) char array[5][20]={ram,shyam,hari,sita,gaury};

47) What will be the output of the program?

```
#include <stdio.h>
void main(){
    int *ptr=10;
    printf("Value of ptr:%d", *ptr);
}
```

- a) 10
- b) Segmentation fault
- c) Compilation error
- d) 0

48) What will be the output of the program?

```
#include <stdio.h>
#include <string.h>
void main(){
    char name1[10]="ram";
    char name2[10]="Shyam";
    printf("String compare result:%d",strcmp(name1,name2));
}
```

- a) -1

- b) 1 or 31
- c) 0
- d) -33

49) What will be the output of the program?

```
#include <stdio.h>
#include <string.h>
void main(){
    char name1[10]="ram";
    char name2;
    printf("String copy result:%s",strcpy(name1,name2));
}
```

- a) Segmentation fault
 - b) ram
 - c) Compilation error
 - d) Runtime error
- 50) In C, what is the value of a pointer variable if it hasn't been assigned any address?
- a) 0
 - b) Null
 - c) undefined
 - d) 1