

```
1. # include <stdio.h>
```

```
void fun(int x)
{
    x = 30;
}

int main()
{
    int y = 20;
    fun(y);
    printf("%d", y);
    return 0;
}
```

- a. 30
- b. 20
- c. Compile Time Error
- d. Run time error

9.

```
# include <stdio.h>
void fun(int *ptr)
{
    *ptr = 30;
}

int main()
{
    int y = 20;
    fun(&y);
    printf("%d", y);

    return 0;
}
```

- a. 20
- b. 30**
- c. Compile time error
- d. Runtime error

10.

```
#include <stdio.h>

int main()
{
    int i = 1024;
    for (; i; i >>= 1)
        printf("SVES");
    return 0;
}
```

How many times SVES be printed in the above program

- a. 10
- b. 11**
- c. Infinite
- d. Compile Time Error

11.

```
#include <stdio.h>

int main()
{
    int i;
    if (printf("0"))
        i = 3;
    else
        i = 5;
    printf("%d", i);
    return 0;
}
```

What will be the output of above program

- a. 3
- b. 5
- c. 03
- d. 05

12.

```
#include<stdio.h>
int main()
{
int n;
for (n = 9; n!=0; n--)
printf("n = %d", n--);
return 0;
}
```

- a. 9 7 5 3 1
- b. 9 8 7 6 5 4 3 2 1
- c. Infinite Loop
- d. 9 7 5 3

13.

Output?

```
#include <stdio.h>
int main()
{
int c = 5, no = 10;
do {
no /= c;
} while(c--);

printf ("%d\n", no);
return 0;
}
```

- a. 1
- b. Runtime Error

- c. 0
- d. Compile Time Error

14. Which one of the following is an application of Queue Data Structure?

- a. When a resource is shared among multiple consumers.
- b. When data is transferred asynchronously (data not necessarily received at same rate as sent) between two processes
- c. Load Balancing
- d. All the above

14. Which of the following is true about linked list implementation of stack?

- a. In push operation, if new nodes are inserted at the beginning of linked list, then in pop operation, nodes must be removed from end.
- b. In push operation, if new nodes are inserted at the end, then in pop operation, nodes must be removed from the beginning.
- c. Both the above
- d. None

16. Which one of the following is an application of Stack Data Structure?

- a. Managing function calls
- b. The stock span problem
- c. Arithmetic expression evaluation
- d. All the above

17. Consider a B+-tree in which the maximum number of keys in a node is 5. What is the minimum number of keys in any non-root node?

- a. 1

b. 2

c. 3

d. 4

**20. Which of the following abstract data types can be used to represent a many to many relation?**

**A.**Tree

**B.**Plex

**C.**Graph

**D.**Both (b) and (c)