Que.1 Which of the following is a keyword in C?

Ans.1 b) while

Que.2 2] What is the output of the following code?

Ans.2 d) 3 4

Que.3 What is the size of the int data type in C on a 32-bit system?

Ans.3 b) 4 bytes

Que.4 Which of the following is the correct syntax to declare a pointer in C?

Ans.4 a) int* ptr;

Que.5 What will be the output of the following code?

Ans.5 c) 30

Que.6 Which of the following is a valid format specifier for printing a float in C?

Ans.6 b) %f

Que.7 Write a while loop that prints numbers from 1 to 5.

Ans.7

```
Int n=1;
Whilw(n<=10)
{
Printf("%d",n);
n++;
}
```

Que.8 What is the output of the following code?

Ans.8 d) 4

Que.9   How can you define a constant variable in C?

Ans.9   a) const int x = 10;

Que.10 Write a function in C that takes an integer and returns its square.

Ans.10

```
Int I, sq;
printf("Enter Num");
scanf("%d",&i);
sq=i*I;
printf("%d",sq);
}
```


Que.11 Explain the difference between malloc and calloc in C.

Ans.11 malloc returns the starting address, it does not zero, while calloc returns the starting address, zero it.

Que.12. What will be the output of the following code?

Ans.12 a) True

Que.13 Write a C program to find the smallest element in an array of integers.

Ans.13

```
int main() {
  int array[10] = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10};
  int i, smal;
  smal = array[0];
  for(i = 1; i < 10; i++) {
    if( smal> array[i] )
      smal= array[i];
  }
```

```
        printf("Smallest element of array is %d", smal);
  }
```

Que.14 What is the purpose of the break statement in C?

Ans: **b) To exit from a loop or switch-case statement**

Que.15 Write a C program that uses a for loop to calculate the sum of the first 10 natural numbers.

Ans:

```
     int n=10, s = 0;
     for(int i=1;i<=n;i++){
     s += i;
      }
     printf("Sum = %d", s);
```

Que.16 Explain how typedef is used in C with an example.

Ans: it used to redefine the name of already existing data type.

Que.17 What will be the output of the following code?

Ans:17 b) Equal to 10

Que.18 Write a C program to check if a given number is even or odd using the modulo operator.

Ans: int n;
```
     printf("Enter an integer");
     scanf("%d", &n);
     if (n%2 == 0){
       printf("Even");
  }
```

```
  Else{

    printf("Odd");

  }
```

Que.19 Explain what a pointer to a pointer is in C and give an example.

Ans: It is used when we want to store the address of another pointer. The first pointer is used to store the address of the variable. And the second pointer is used to store the address of the first pointer.

Que.20 Write a C program that uses a recursive function to calculate the Fibonacci sequence

up to n terms.