

Questions from Chapter 2&3

1) Which of the following is the correct declaration of an array?

a. `int m(10)` b. `int [10]m` c. `m[10] int` d. `int m[10]`

2) Identify the last index of the array `float P[8]` from the following choices.

a. 7 b. 8 c. 0 d. 9

3) Consider the following C++ statements:

```
int A[4] = {1,2,3,4};
```

```
int B = (A[3]+A[0]+A[2]) / A[1];
```

Predict the value of the variable 'B'

4) Consider the following array declaration

```
int A[] = {4,5,8};   int B[] = {2,10};
```

Write a valid C++ statement for finding the difference between the last element of the array 'B' and the first element of the array 'A'

5) Write a statement for storing the string "NO SMOKING" using a character array with name 'ARR' of minimum size

6) Suppose 'NUM' is an array containing integer numbers. Identify the name of the operation in which all the elements of the array is increased by 1.

7) If 'M[20]' is an array, then which element of the array will be referenced by 'M[11]'?

8) Predict the output after executing the following statements if the string entered is

"Computer Applications".

```
char WORD[15];
```

```
cin >> WORD;
```

```
cout << WORD;
```

9) Consider the following statement and predict the error in the output

```
char N[] = "123";
```

```
cout<<(N[0]+N[1]+N[2]);
```

10) Suppose you need to store the numbers 5, 2.4, 0.1 and 8 into an array with name 'NUM'. Write two possible solutions to this problem (write the C++ statement).

11) Predict the output of the following code

```
int a[5], sum, i;

for( i=0; i<5; i++)
{
    a[i] = i+1;
    sum+=a[i];
}

cout<<sum;
```

12) A student used two different statements for reading a string "RAM KUMAR" as follows. In both cases the string is printed. Compare the outputs and give reason.

Method 1	Method 2
char AR[20];	char AR[20];
cin>>AR;	gets(AR);
cout<<AR;	cout<<AR;

13) Consider the following statements and predict the output

```
int N[ ]={ 2, 5, 6, 3, 7, 4};

for(int i=0; i<6; i++)
{
    if(N[i]%2==0)
        s=s+N[i];
}

cout<<s;
```

14) Write suitable statements to accept a string from the keyboard and find the length of it. For example if “WELCOME” is accepted, the output will be 7.

15) Write statements to declare an array and initialize it with the numbers 1,2,3,4,5 and print 5,4,3,2,1.

16) Write array declarations for the following

- a. To store the heights of 25 students in your class.
- b. To store the name of your school.
- c. To store all odd numbers between 2 to 20.

17) Consider the following cases and predict the output:

- i. `char ch[ ] = “hai”; cout<<”hello”; cout<<ch;`
- ii. `char ch[ ] = “hai”; puts(”hello”); puts(ch);`

18) Write statements to store the string “INDIA” in an array and print as follows:

I

N

D

I

A

19) Predict the output of the following code fragment:

```
int K[ ]={1, 2, 3, 4};
```

```
for(int i=0; i<4; i++)
```

```
    cout<<K[i] * K[i]<<”\t”;
```

20) Write C++ statements to accept marks of 6 subjects of a student using an array and calculate his total mark and average (complete program not needed).

21) Consider the following array declaration. Write statements to count how many numbers are greater than zero.

```
int p[ ]= { -5, 6, -7, 0, 8, 9};
```

22) Write a C++ program to accept a sentence and count how many times the letter 's' is occurring in it. For example the sentence may be 'This is my school'.

23) Write a C++ program to store the given string in an array and reverse it. For example if ABCD is given, the output will be DCBA.

24) Construct the following prototype for the following functions.

a) The function Display() accepts one argument of type double and does not return any value.

b) Total() accepts two arguments of type int, float respectively and returns a float type value.

25) A function can be invoked by two methods based on passing the parameter. Which are they? How do they differ?

26) Read the following C++ statement:

```
int ar[ ]={12,34,5,25,76};
```

a) How many bytes will be allocated for this array? b) Write a C++ for loop to display the even numbers in the array.

27) Define a user defined function that can accept two numbers on calling and return the sum of their squares. (For example, if 2 and 3 are passed to the function, it should return 13, which is obtained by $2^2 + 3^2$)

28) pow () is defined in header file.

29) The marks obtained by 50 students are to be stored. Write the variable declaration statement in C++ for this. How will you refer the marks of the first and the last student?

30) a) What is the benefit of using gets() function over cin>> for inputting a string data? b) How does gets() and getline() function differ?

Ans: b) The getline () function removes the newline character from the input stream while, get () leaves the newline in the input stream.

31) is the default parameter passing mechanism in C++.

32) The parameters present in function definition is called

33) The main() is an example of function.

34) is a group of statements executed separately.

35) functions are a part of C++ library.