CMR Engineering College

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2022-26_I_CS_B_C Programming Lab

C PROGRAMMING LAB_MCQ TEST_SINGLE DIMENSIONAL ARRAY

Attempt : 1
Total Mark : 30
Marks Obtained : 26

Section 1 : MCQ

1. What is the output of the code given below?

```
#include <stdio.h>
int main()
{
   int ary[4] = {1, 2, 3, 4};
   int p[4];
   p = ary;
   printf("%d\n", p[1]);
}
```

Answer

Compile time error

Status : Correct ***Marks : 1/1***

2. What is the output of the C Program?

```
int main()
{
   int a[3] = {10,12,14};
```

```
    a[1]=20;
    int i=0;
    while(i<3)
       {
       printf("%d ", a[i]); i++;
       }
}
```

Answer

10 20 14

Status : Correct ***Marks : 1/1***

3. An array A consists of n integers in locations A[0], A[1] ....A[n-1]. It is required to shift the elements of the array cyclically to the left by k places, where 1 <= k <= (n-1). An incomplete algorithm for doing this in linear time, without using another array is given below. Complete the algorithm by filling in the blanks. Assume alt the variables are suitably declared.

```
min = n; i = 0;
while (_____) {
    temp = A[i]; j = i;
    while (_____) {
    A[j] = _____
    j= (j + k) mod n ;
    If ( j< min ) then
       min = j;
}
A[(n + i — k) mod n] = _____
i = _____
```

Answer

i < min; j!= (n+i-k)mod n; A[(j + k)mod n]; temp; i + 1;

Status : Correct ***Marks : 1/1***

4. Which is an incorrect declaration of one dimensional array ?

Answer

int x[];

Status : Correct ***Marks : 1/1***

5. Which of the following is not possible statically in C?

Answer

Jagged Array

Status : Correct ***Marks : 1/1***

6. Which of the following declaration is illegal?

Answer

int size = 3;int array[size] = {1, 2, 3};

Status : Correct ***Marks : 1/1***

7. What is the output of C Program?

```
int main()
{
   int a[];
   a[4] = {1,2,3,4};
   printf("%d", a[0]);
}
```

Answer

Compile error

Status : Correct ***Marks : 1/1***

8. Disadvantage of array compared to linked list in C is

Answer

It is necessary to declare too many variables

Status : Wrong ***Marks : 0/1***

9. A one dimensional array A has indices 1....75. Each element is a string and takes up three memory words. The array is stored at location 1120 decimal. The starting address of A[49] is

Answer

1264

Status : Correct ***Marks : 1/1***

10. What is the index number of the last element of an array with 29 elements?

Answer

28

Status : Correct ***Marks : 1/1***

11. A program P reads in 500 integers in the range [0..100] exepresenting the scores of 500 students. It then prints the frequency of each score above 50. What would be the best way for P to store the frequencies?

Answer

An array of 500 numbers

Status : Wrong ***Marks : 0/1***

12. What will be the output of the program?

```
#include<stdio.h>
void main()
{
  int a[5]={5,1,15,20,25};
  int i,j,m;
  i=++a[1];
```

```
  j=a[1]++;
  m=a[i++];
  printf(“%d, %d, %d”,i,j,m);
}
```

Answer

3,2,15

Status : Correct ***Marks : 1/1***

13. What is the output of the C Program?

```
int main()
{
   int a[] = {1,2,3,4};
   int b[4] = {5,6,7,8};
   printf("%d,%d", a[0], b[0]);
}
```

Answer

1,5

Status : Correct ***Marks : 1/1***

14. An array elements are always stored in _____ memory locations.

Answer

Sequential

Status : Correct ***Marks : 1/1***

15. What will be the output of the following?

```
#include <stdio.h>
int main(void)
{
  int a;
  int b = 1;
```

```
  int x[5] = { 1, 2, 3, 4, 5 };
  a = 5 * 4 + x[b++] - (9 / b);
  printf("%d", a);
  return 0;
}
```

Answer

18

Status : Correct ***Marks : 1/1***

16. Fill the missing statement in the code to sum up the even index values with 1000 from the array

```
#include<stdio.h>
int main()
{
   int i,sum=0;
   int a[10]={1,2,3,4,5,6,7,8,9,10};
   for(____(1)_____)
   {
      sum=_____(2)___;
      printf("%d\n",sum);
   }
}
```

Answer

(1) i=0;i<10;i=i+2 (2) a[i]+1000

Status : Correct ***Marks : 1/1***

17. Given the following declarations

What is the value of list[n]*2?

```
int list[12] = {4,9,1,7,3,6,2,11,12,8,5,10};
int n=3;
```

Answer

14

Status : Correct ***Marks : 1/1***

18. What is the need for C arrays?

Answer

All the above.

Status : Correct ***Marks : 1/1***

19. Does C perform array out of bound checking? What is the output of the following program?

```
int main()
{
   int i;
   int arr[5] = {0};
   for (i = 0; i <= 5; i++)
      printf("%d ", arr[i]);
   return 0;
}
```

Answer

The program always prints 0 five times followed by garbage value

Status : Wrong ***Marks : 0/1***

20. Fill in the missing statement in the given code to print the alternate elements present in the array.

```
#include <stdio.h>
void main()
{
   int i;
   int egArray[] = { 2, 4, 6, 8, 10, 1, 3, 5, 7, 9 };
   for ( _____ )
      printf("%d ",egArray[i]);
```

}

Answer

i= 0 ; i < 10 ; i = i + 2

Status : Correct ***Marks : 1/1***

21. If x is an array of integer, then the value of &x[i] is same as

Answer

x+i

Status : Wrong ***Marks : 0/1***

22. int a [8] = { 0, 1, 2, 3 };

The definition of a above explicitly, initializes its first four elements. Which one of the following describes how the compiler treats the remaining four elements?

Answer

The remaining elements are initialized to zero(0).

Status : Correct ***Marks : 1/1***

23. What is the output of C program with arrays?

```
int main()
{
   int ary[4], size=4;
   printf("%d ", ary[size]);
   return 0;
}
```

Answer

Random number

Status : Correct ***Marks : 1/1***

24. Fill the missing part in the for loop to print the alternate number in the array.

```
#include<stdio.h>
int main()
{
   int i,sum=0;
   int a[10]={1,2,3,4,5,6,7,8,9,10};
   for(i = 0; i < 10; _____)
   {
      printf("%d\n",a[i]);
   }
}
```

Answer

i+=2

Status : Correct ***Marks : 1/1***

25. Different ways to initialize an array with all elements as zero are

Answer

All of the mentioned

Status : Correct ***Marks : 1/1***

26. Array sizes are optional during array declaration by using _____ keyword.

Answer

extern

Status : Correct ***Marks : 1/1***

27. What is the output of the C program?

```
int main()
```

```
{
   char grade[] = {'A','B','C'};
   printf("GRADE=%d, ", *grade);
   printf("GRADE=%d", grade[0]);
}
```

Answer

65 65

Status : Correct ***Marks : 1/1***

28. Size of an array can be evaluated by:

(Assuming array declaration int a[10];)

Answer

sizeof(a);

Status : Correct ***Marks : 1/1***

29. The elements in the array of the following code are

int array[5] = {5};

Answer

5, 0, 0, 0, 0

Status : Correct ***Marks : 1/1***

30. What happens when you try to access an array variable outside its size?

Answer

Some garbage value will be returned

Status : Correct ***Marks : 1/1***