

Question Paper

Exam Date & Time: 02-Mar-2021 (10:00 AM - 12:30 PM)



CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

COMPUTER CONCEPTS AND PROGRAMMING [CE143]

Marks: 70

Duration: 150 mins.

Multiple Choice Questions

Answer all the questions.

Section Duration: 150 mins

- 1) Select the type of C programming language. (1)
[Object Oriented](#) [Procedural](#) [Functional](#) [Directed](#)
- 2) Which of the following is not a valid variable name declaration? (1)
[int](#) [int](#) [int](#) [int](#)
[_a5:](#) [a_7:](#) [5_a:](#) [_9a:](#)
- 3) What will be the output of the following C code? (1)

```
#include <stdio.h>
int main()
{
    int Store = 25;
    Store = 10;
    printf("%d", Store);
    return 0;
}
```

[25](#) [10](#) [25.](#) [0](#)

- 4) After the compilation phase, which file is generated in compilation and execution of C? (1)
[Executable code](#) [Object code](#) [Assembly code](#) [None of the mentioned](#)
- 5) Which datatype does not have the fixed size? (1)
[int](#) [struct](#) [double](#) [float](#)
- 6) What will be the output of the following C code? (1)

```
#include <stdio.h>
#define a 15
int main()
{
    const int a = 10;
    printf("a = %d\n", a);
}
```

[10](#) [5](#) [Compilation Error](#) [Runtime Error](#)

- 7) Which of the following statements is/are correct? (2)

- i. Global constant variables are initialized to one
- ii. Const keyword is used to define constant values

iii. You cannot reassign a value to a constant variable

iv. constants need not be defined

How many times "C Programming" will be printed?

(1)

```
int main()
{
int a = 0;
while(a++);
{
    printf("C Programming");
}
return 0;
}
```

1 time Infinite times 0 time Compilation error

What is the reason for getting compilation error on running the below mentioned code?

(1)

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

Even though the array is not initialized, size of array is not mentioned Fourth element is not having appropriate value Array is not declared correctly None

What is the output of the following C program?

(3)

```
int main()
{
    float marks[3] = {25.5, 72.6, 24.5};
    int a=0;
    while(a<3)
    {
        printf("%.3f,", marks[a]);
    a++;
    }
}
```

25.005, 72.006, 24.005 25.500, 72.600, 24.500 25.5, 72.6, 24.5 Compilation Error

What would be the output of the following code?

(2)

```
int main()
{
    int a[5] = {5,6,7,8,9};
    a[2]++;
    int i=0;
    while(i<5)
    {
```

```

        printf("%d ", i[a]);
    }
}

5.6.4.7.8 5.6.8.8.9 4.5.6.7.8 5.6.7.8.9

```

- 12) An entire array is always passed by ___ to a called function. (1)

[Call by value](#) [Call by reference](#) [Address Relocation](#) [Address restructuring](#)

- 13) What would be the output of the following code? (1)

```

int main()
{
    float c = 2.5 + 3.5;
    printf("%f", c);

    return 0;
}

```

[5](#) [5.0](#) [5.000000](#) [0.000000](#)

- 14) What is the output of this statement "printf("%d", (a++))"? (1)

[The current value of a](#) [The latest value of a after increment i.e. a+1](#) [Compilation Error](#) [1](#)

- 15) A pointer is a memory address. Suppose the pointer variable has p address 1000, and that p is declared to have type int*, and an int is 4 bytes long. What address is represented by expression p + 2? (2)

[1002](#) [1004](#) [1006](#) [1008](#)

- 16) Which one of the following loop constructs will always be executed atleast once? (1)

[switch](#) [for](#) [do](#) [while](#) [While](#)

- 17) Which statement from the following will copy the null-terminated string that is in array src into array dest? (1)

[dest = src;](#) [dest == src;](#) [strcpy\(str.dest\);](#) [strcpy\(dest, str\);](#)

- 18) What is the maximum number of characters that can be held by string variable char with size [20]? (1)

[18](#) [19](#) [20](#) [21](#)

- 19) What would be the output of the following code? (1)

```

int main()
{
    int a = 5;
    void *ptr = &a;
    printf("%d", *(int *)ptr);
    return 0;
}

```

[5](#) [12](#) [0](#) [Compilation Error](#)

- 20) Match the following correctly: (4)

A	B
1 Array	<u>a</u> Entry controlled loop
2 while	b Derived datatype

3 do.. while	c User defined datatype
4 struct	d Exit controlled loop

[1-c,2-a,3-c,4-b](#) [1-b,2-a,3-d,4-c](#) [1-d,2-a,3-b,4-c](#) [1-a,2-c,3-b,4-d](#)

21) What would be the output of the following code? (2)

```
#include <stdio.h>
void main()
{
    int x = 0, y = 1, z = 7;
    int store;
    store = x && y || z++;
    printf("%d", z);
}
```

8 6 1 7

22) What is the result of logical or relational expression in C? (1)
 True or 0 or 0 if an expression is false and any positive number if an
 False 1 expression is true None of the mentioned

23) What will be the output of the following code? (1)

```
#include <stdio.h>
int main()
{
    int a = 10, b = 5, c = 5;
    int d;
    d = b + c == a;
    printf("%d", d);
}
```

5 1 10 0

24) What is the output of the following code? (1)

```
#include <stdio.h>
void main()
{
    float x = 0.1;
    if (x == 0.1)
        printf("Condition is satisfied");
    else
        printf("Condition is not satisfied");
}
```

Condition is satisfied Condition is not satisfied Runtime error Compilation error

25) What will be the output of the following C code? (1)

```
#include <stdio.h>
void main()
{
    int x = 97;
    char y = x;
    printf("%c\n", y);
}
```

97 98 a A

- 26) What will be the output of the following C code considering the size of a short int is 2, char is 1 and int is 4 bytes? (2)

```
#include <stdio.h>
int main()
{
    short int i = 17;
    char c = 99;
    printf("%d, %d, %d\n", sizeof(i), sizeof(c), sizeof(c + i));
    return 0;
}
```

2.1.2 2.1.1 2.1.4 2.2.8

- 27) Which of the following typecasting conversions is possible by implicit typecasting? (1)
 Widening conversions Narrowing conversions Widening & Narrowing conversions None of the mentioned

- 28) What would be the output of the following code? (2)

```
#include <stdio.h>
int main()
{
    int a = 7, b = 3;
    if (a = 4)
        b--;
    printf("%d, %d", a, b--);
}
```

4.2 2.4 5.3 6.2

- 29) What will be the output of the following code? (1)

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

1 0 2 Compilation Error

- 30) The .(dot) operator can be used to access structure elements using a structure variable. True or False (1)
 True False

- 31) Which statement is/are correct for union? (3)

- i. Size of union is the size of largest element in the union
- ii. Size of union is the size of smallest element in the union

iii. All members in union share the same memory location

iv. Union is user defined datatype

i.ii i.iii.iv All are correct iii. iv

32) What will be the output of the following code? (1)

```
#include <stdio.h>
int main()
{
    int y = 7;
    int z = y +(y = 8);
    printf("%d\n", z);
}
```

7 14 8 16

33) What will be the output of the following C code? (1)

```
#include <stdio.h>
void main()
{
    int b = 2 * 8 + 4 - 6 * (5, 2);
    printf("%d", b);
}
```

7 12 8 4

34) What will be the output of the program if the array begins at 6254320 in memory? (2)

```
void main()
{
    int arr[] = {1,2,3,4,5};
    printf("%u, %u, %u\n", &arr[0], &arr[1], &arr[2]);
    return 0;
}
```

6254320, 6254321, 6254320, 6254324, 6254321, 6254325, 6254320, 6254330,
6254322 6254328 6254329 6254340

35) Which of the following is not a valid declaration of arrays? (1)

int marks[4] = {12, 13, float area[5] = {13.2, int marks[] = {13, 14, 15, int marks[3] = {12, 13,
14, 17} 15.5, 7.5} 16, 17} 14, 16}

36) Which of the following function is used to show reverse of string? (1)

reverse() strrev() streverse() none of the above

37) Consider the following declaration of a 'two-dimensional array in C: (2)

char a[100][100];

Let us Assume that the main memory is byte-addressable and that the array is stored starting from memory address 0, the address of a[40][50] is..

4050 5040 4040 5050

38) What error would the following function give on compilation? (1)

```
void main()
{
    fun();
}
fun(int a, int b)
{
```

```

    int a = 20;
    return a;
}

'a' is redeclared with different kind   b is not utilised in      'a' cannot be initialized inside      No error will
of symbol                           function                         a function                      occur

```

- 39) Which keyword can be used to transfer control from a function back to the calling function? (1)
 switch goto Break

- 40) Which of the following statement is true about a function with an argument? (1)
 No value is pass to the function during function call. function with an argument must not have return type function with an argument is declared and define with parameter list none of the above

- 41) If a variable declared inside a function without any specification has default storage class as (1)
 Automatic External Static Register

- 42) What will be the output of the following code? (2)

```

void main()
{
    union store
    {
        int a;
        int b;
    };
    union store sl;
    sl.a =5;
    sl.b =10;
    printf("%d %d\n", sl.a, sl.b);
    return 0;
}

```

5.10 10.10 10.5 None of the mentioned

- 43) Identify the correct differences between Union and Structure. (4)

Sr. no.	Union	Structure
i.	Shared storage allocation is assigned for each members in Union	Unique storage allocation is assigned for each member in Structure
ii.	Individual members can be accessed simultaneously	Only one member can be accessed at a time
iii.	Altering values of one member will affect another member.	Altering the value of one member will not affect the values of another member

I II III I, II

- 44) What will be the output of the following? (1)

```

#include <stdio.h>
void main()
{
    int i=0, b=2;
    labell: printf("%d", i);
}

```

```
    if (i == 0)
        goto labell;
}
```

1 0 infinite 0 2

45) What is the default return type if it is not specified in function definition? (1)

double int float char

46) Which function would you use to convert 1.98 to 1? (1)

ceil floor fabs abs

47) What will be the output of the following code? (1)

```
#include <stdio.h>
int main()
{
    int i = 0, j = 0;
    while (i < 2, j < 7)
    {
        i++;
        j++;
    }
    printf("%d, %d\n", i, j);
}
```

2.7 7.7 7.2 0.7

48) Identify the below mentioned declaration. (2)

int (*a)[5];

An array "a" of
pointers

A pointer "a" to an
array

A ragged
array

None of them

49) What will be the output of the following code based on the scope of variable x? (1)

```
#include <stdio.h>
void main()
{
    int x = 7;
    {
        x = 3;
        printf("%d", x);
    }
}
```

7 3 73 None of the mentioned

50) What will be the output of the following code? (1)

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

Numbers will be displayed on
the output screen until the
signed limit of short

Nothing will be
displayed on the
screen

This program will get into an
infinite loop and keep printing
numbers with no errors

The control
won't fall into
the for loop

-----End-----