1. A loop in programming -
2. means making a decision from multiple choice.
3. means a circular method.
4. **repeating the same instruction based on a condition**
5. None of the above.

Explanation - A loop in programming repeating the same instruction.based on a condition.It is a feature of programming.

2. Choose a correct C for loop syntax.

1. **for(initialization; condition; increment/decrement) { //statements }**
2. for(condition;initialization; increment/decrement) { //statements }
3. for(initialization increment/decrement; condition) { //statements }
4. for(initialization; condition; increment/decrement;) { //statements }

Explanation - increment or decrement operation must be at third place.

3. while(5) { //statements } it is a syntactic representation of finite loop -

**a)false**

b)true

Explanation - In C programming any positive value in a while loop condition defined that ..the condition is always true.

4.

#include<stdio.h>

int main()

{

int i;

for(i=0;i<=100;i++){}

printf("%d\n",i);

return 0;

}

What will be the final value of i ?

1. 0
2. 99
3. 100
4. **101**

Explanation - The loop runs from 0 to 100 .. and when the value of i will be 101 the loop terminates. As the i declare outside of the loop that’s why when we print the value of i after the for loop the value of i will be 101.

5. Which represents an infinite loop in C programming?

a) for(;;) {}

b) while(1) {}

**c) Both b and c**

d) None of the above

Explanation - In C programming we represent an infinite loop using for by this-> for(;;) {}, and in the while loop condition if put only a positive value it acts as an infinite loop.

6. Choose a correct C while loop syntax.

1. While(condition) { //statements }
2. **while(condition) { //statements }**
3. while(condition) [ //statements ]
4. while(condition) ( //statements )

Explanation - Syntax of while loop is while(condition) { //statements }

7.

#include <stdio.h>

int main()

{

int i=3;

while(i>0)

{

i=i-1;

int j=100;

j=j-1;

printf("%d ",j);

}

return 0;

}

What will be the output of this code ?

a) Infinite Loop

**b) 99 99 99**

c) 99 98 97

d) 2

Explanation - Here the i=i-1 in the first statement of while(i) changes the i of main()

And j=j-1 just after the declaration statement int j=100; changes local j of while loop.

8.

#include <stdio.h>

int main()

{

int val=printf("00\n");

printf("%d",val);

return 0;

}

What will be the output of val specifically?

a) 00

b) 0

c) 2

**d) 3**

Explanation - The printf() function returns the number of characters that are printed. If there is some error then it returns a negative value. So there are total of 3 characters , \n is also a character.

9.

#include <stdio.h>

int main()

{

for(int i=10;i>=0;i--)

{

if(\_\_-5)

{

printf("ok");

}

}

return 0;

}

You want to print ok 0 times ..Now fill the blank space of if condition appropriately.

1. **5**
2. 4
3. 3
4. 2

Explanation - 5-5 gives 0 …0 means false condition.Then the if block will never execute.

10. Loops in C are-

1. for
2. while
3. do while
4. **all of the above**

Explanation - All of the above loops exist in C programming.