Examination Roll No :- 21312915017

Name of Program :- B.Tech. (Information Tech
and Mathematical Innovation.)

Semester :- Ist Sem.

Unique Paper Code :- 32861103

Title of the Paper :- Automaing Real world through
Programs : Programming Fundamentals

Solution 4

In C Programming language we have 3 iterative Statements :-

1) while
2) do while
3) for

1) while.

It is a control flow statement that allows code to executed repeatly untill the given boolean condition satifys.

```
#
int i = 0;
while (i < 10)°
{
    printf ("The value is i is %d", i);
    i ++ ;
}
```

Output :-
0 1 2 3 4 5 6 7 8 9

→ The program is getting excuted repeatly untill the condition i.e (i < 10) becomes false i.e @ i = 10.

2) do while :-

It is very similar to the while loop but the difference is that it checks for the condition after the excution of Statements.

eg.
```
int i=0;
do{
    printf("%d", i);
    i++;
} while (i < 10);
```

Output :-

01 2 3 4 5 6 7 8 9

3) for :-

This is a repetition control structure that allows us to efficiently write a loop that needs to excuted for a given no. of times.

eg.
```
int arr[5] = { 3, 4, 10, 8, 12}
for(int i=0; i<5 ; i++)
{
    printf("%d", arr[i]);
}
```

Output.

3 4 10 8 12.

→ Here we controlled the loop to excaute only 5 times.