

1. What will be the output of this for loop?

```
for (int x=5; x>0; x-=2) {  
    printf ("%d", x);  
}
```

- a) 54321 b) 42 c) 531 d) 5432

2. Which of the following is true about a while loop?

- a) It executes the loop body at least once
- b) The condition is checked at the end of each iteration.
- c) The loop body will not execute if the condition is initially false
- d) It is an exit-controlled loop

3) What happens in a while loop if the condition is always true?

- a) The loop will run indefinitely
- b) The loop will run only once
- c) The loop will never execute
- d) The loop will exit after a fixed number of iterations.

4) What is the output of this while loop?

```
int j=0;  
while (j<5) {  
    printf ("%d", j * 2);  
    j += 1;  
}
```

- a) 02468 b) 02468 c) 0246810 d) 12345

5) What will be the output of the following while loop?

```
int x=5;  
while (x>0) {  
    x -= 5;  
}
```

- a) 5 b) 0 c) The loop will not execute d) An error will occur

6) What is an example of iteration in programming?

- a) if-else b) switch c) for loop d) return statement

7) Which type of loop is guaranteed to execute the body of the loop at least once?

- a) for loop
- b) while loop
- c) do-while loop
- d) nested loop

8) What will be the value of i after the following C++ code snippet executes?

```
int i=0;
```

```
while (i<5) {  
    i++;  
}
```

- a) 4
- b) 5
- c) 6
- d) 0

9) While loop is best to use when the number of iteration is known in advance?

- a) while loop
- b) do-while loop
- c) for loop
- d) infinite loop

10) What is the result of a for(;;) loop in C++?

- a) A syntax error
- b) No output
- c) An infinite loop
- d) A loop that runs only once

11) What is the output of this C++ code?

```
int age = 20;  
do {  
    age++;  
} while (age < 20);  
printf ("%d", age);
```

- a) 21
- b) 20
- c) compiler error
- d) None of the above

12. Which of these is a post-test loop?

- a) for loop
- b) while loop
- c) do-while loop
- d) All of the above

13. what is the output of the following code?

```
for (int i=0; i<3; i++) {  
    printf("%d", i);  
}
```

- a) 123 b) 012 c) 0123 d) 12

14. what is the output?

```
int i=5;  
do {  
    printf("%d", i);  
    i--;  
} while (i>3);
```

- a) 54 b) 543 c) 43 d) 5

15) What of the following is a correct for-loop syntax?

- a) for (i=0; i<0; i++) c) for (i=0; i++)
b) for (i<10; i++) d) for (i=0, i<10)

16) what is wrong with this?

16) what is the output of the following c code snippet?

```
int k;  
for (k=1; k<=5; k++);  
{  
    printf("%d", k);  
}  
a) 12345      b) 1234      c) 6      d) 5
```

17) What keyword is used to immediately exit a loop?

- a) continue b) break c) return d) exit

18) In a for loop, which part is optional?

- a) initialization b) condition c) Increment / Decrement
d) All the above.

19) How many times will the following loop execute?

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

- a) 0 times
- b) 1 times
- c) 10 times
- d) infinite times