**Roll No. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**NATIONAL UNIVERSITY OF MODERN LANGUAGES ISLAMABAD**

**DEPARTMENT OF SOFTWARE ENGINEERING**

**Mid Term Examination – Spring 2021 BSSE I (Evening)**

**Subject: Programming Fundamentals Instructor: Waris Ali**

**Allowed Time: 01 Hours 45 Mins Total Marks: 20**

**Instructions: -**

1. Attempt all questions.
2. Overwriting / unnecessary details will be considered as incorrect answer.

**Q1**. **3+2+2**

1. What is the output of the following program (if there is any syntax error, ignore it).

#include <iostream>

int N = 7;

main()\_{

int i, x;

for (i = 1; i <= N; i++) {

cin >> x;

cout << i << ". " << x << " ";

if(i % 3 = = 0) {

cout << endl; }

}

cout << endl;

}

**What is displayed/output if the input values given by user are?**

**Input:** 11 12 13 14 15 16 17

1. Answer the questions below concerning the following code.

#include<iostream.h>

#include<conio.h>

main( ){

int n;

cout << "Enter an integer: ";

cin >> n;

if (n <10)

cout << "less than 10" << endl;

else if (n > 5)

cout << "greater than 5" << endl;

else

cout << "not interesting" << endl;

getch();

}

1. What will be the output of the above code if the interactive user enters the value 7?
2. For what values of n, output of the fragment above to be "not interesting"?
3. Underline where syntax errors occur in the following code and also suggest correction for the highlighted error.

Note: Don’t worry about header files, return statement and namespaces.

1). int main(){

int x;

cin >> x;

if (x = 5)

{

cout << x;

}

2). main(){  
 int i;

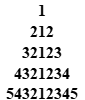
while (i < 5);

{  
 cout << i << "\n";  
 i++;  
}

}

**Q2**.  **7**

Write a C++ program that print the following pattern (use loops).



**Q3**. 6

Write a program that takes 3 numbers as input from user and displays the smallest number. Note only use nested if-else structure, don’t use logical operators.