Course Code: CSC102	**Course Title:**	Programming Fundamentals
Prerequisite: NA	**Instructor:**	Engr. Muhammad Waqas
Module: 2 **Program:** BEE	**Total Marks:** 50 **Time Allowed:**	120 min

Note: Attempt all questions.

Q1.	(a)	**Code** a function that will return square of any integer number.	Marks 6
			CLO 2
	(b)	**Code** a program where you input two 3x3 matrices from user and output the sum in matrix form.	Marks 6
			CLO 1
Q2	(a)	**Code** a program to get the following series 65, 44, 27, 14, 5, 0, -1, 2, 9, 20. Hint: The series is created by the formula $2x^2 - 3x$ with x=-5 to 4.	Marks 8
			CLO 1
	(b)	**Code** the following scenario, input 10 numbers from the user and take the sum of squares of each number stored in the array. Display the answer at end.	Marks 8
			CLO 1
Q3	(a)	**Code** a function that reads a non-negative number (for example 8) and prints it in the following manner. 8 = 8, 7, 6, 5, 4, 3, 2, 1	Marks 10
			CLO 2

Q4	(a)	**Identify** errors in the following codes if any
		`#include <math.h>`
		`using namespace std`
		`Void main()`
		`{`
		`int n;`
		`while (n >= 0)`
		`{`
		`cout >> n * n >> "\n";`
		`--n;`
		`}`
		`cout >> n >> "\n";`
		`while (n < 4)`
		`cout >> n++ >> "\n"`
		`cout >> n >> "\n"`
		`while (n >= 0)`
		`cout >> (n ) >> "\n";`
			Marks 6

			CLO 2

	(b)	**Determine** the output of the following code?
		`#include <iostream.h>`
		`using namespace std;`
		`int main(){`
		`int n = 3;`
		`while (n >= 0){`
		`cout << n * n << endl;`
		`n--;`
		`}`
		`cout << n << endl;`
		`while (n < 4)`
		`cout << n++ << endl;`
		`cout << n << endl;`
		`return 0;`
		`}}`
			Marks 6

			CLO 2