

Assignment  
Subject: Mathematics  
6<sup>th</sup> Semester (MAJOR)  
Paper: M603  
(Computer Programming in C)

Full Marks: 15

**Instruction:** After completing your assignment, save it as a pdf and name it as “NAME\_RollNo\_M603\_major” and then mail it to [mathematics.adp.2021@gmail.com](mailto:mathematics.adp.2021@gmail.com) . Here, type your name and roll no in the place of NAME and RollNo while naming the file.

**1. Answer the following question:**

**2 x 3 = 6**

- a. Where C-Programming was first developed and by whom? Define C-Programming.
- b. Define algorithm and flowchart. Write the algorithm and draw the flowchart to find the solution the equation given below:

$$x^2 - 5x + 6 = 0.$$

- c. Write the following mathematical expression as C-expression:

I.  $\log(a^2 + b^{3/2} + |\sqrt{(abc + a^3)}|)$

II.  $\frac{\sqrt[5]{x+y} - \sin(x^5)}{\sqrt[9]{\cos(\frac{x}{y}) + \tan(y^3)}}$

2. Write a C-Programme to find the sum, difference and product of two given integers.

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3. Write a C-Programme to find the value of y when the value of x is entered, where

$$y = \sqrt{(x^3 + x^2 + x + 1)} + \tan(x) .$$

**5**