

Due Date: Thursday, July 4, 2019

Please read the following instructions before attempting the solution of this assignment:

- To solve this assignment, you should have good command over lectures 16-22.
- Try to consolidate the concepts that you learn in the lectures with these questions.
- Upload assignments properly through VULMS. We'll NOT accept Assignments through Email.
- Write your ID on the top of your solution file.
- All students are directed to use the font and style of text as is used in this document.
- Use MathType or Equation Editor etc. for mathematical symbols and equations.
- Remember that you are supposed to submit your assignment in MS-Word format any other format like scanned, images, MS-Excel, HTML etc. will not be accepted.
- Do not use colourful backgrounds in your solution files.
- This is an individual assignment (not a group assignment). So, keep in mind that you are supposed to submit your own, self-made and different assignment even if you discuss the questions with your class fellows. All similar assignments (even with some meaningless modifications) will be awarded zero marks, and no excuse will be accepted. This is your responsibility to keep your assignment safe from others.

Note: Up to 50% marks might be deducted for those assignments which are received after the due date.

Attempt ALL questions.

Question No.1:**Marks: 10**

Find the rate of change of $h(x) = 2 \cos(3x + \tan x)$ with respect to x .

Question No.2:**Marks: 10**

Differentiate with respect to x :

$$y = (4 - x)^{\frac{1}{x^2}}$$