

ASSIGNMENT NO 1(MTH 202)

Maximum Marks: 20

Due Date: 24th June, 2020

DON'T MISS THESE: Important instructions before attempting the solution of this assignment:

- To solve this assignment, you should have good command over **1 - 18 lectures**.
- Upload assignments properly through LMS, No Assignment will be accepted through email.
- Write your ID on the top of your solution file.
- Don't use colorful back grounds in your solution files.
- Always send your solution in dox or docx file with proper accessible math type symbols.
- You should remember that if we found the solution files of some students are same then we will reward zero marks to all those students.
- Also remember that you are supposed to submit your assignment in Word format any other like scan images etc will not be accepted and we will give zero marks correspond to these assignments.

Question No 1:**Marks=10**

Formulate the argument symbolically and test its validity using the truth table.

The number is not divisible by 12 if and only if it is not divisible by 3 and 4.

The number is divisible by 12

Therefore it is divisible by 3 and 4.

Question No 2:**Marks=10**

Given function $f(x) = \frac{x+1}{x+2}$.

- a) Find Domain and range of f
- b) Determine whether
 - 1) f is injective
 - 2) f is surjective
 - 3) f is bijective