## Summer Term 2021 (Assignments on the course MAT 112)

CSE: Batches 54 ,Eve- 29 & EEE Marks 20

[ You have to write your Name, ID, Batch, Course name and code on the top of the script and submit it to the assignment option of your Google classroom on or before 13 August 2021 at 10:30 AM].

(Your writings must be your own and remember that, similar writings between two of you will be rejected).

## ( Write down any two topics of the followings)

**Topic 1**: Explanation of Leibnitz's Theorem (without proof) for nth derivative of the product of two functions with its application using trigonometric or exponential functions as your choice. [You can use similar types of problems done in the online class but not exactly this].

**Topic 2:** Description of partial differentiation mentioning its uses in various branches of modern science. Also verification of Euler's theorem for homogeneous function of two variables choosing an example. [Your choosing will not be exactly same problems done in the online class but may be similar to those].

**Topic 3:** Verification of Rolle's theorem and Mean value theorem( Lagrange's form) using function as your choice. [Your choice will not be exactly same problems done in the online class but may be similar to those].