



## **Modified teaching technique to help students gain confidence on Mathematical concepts, derivations and Numerical solving in Chemistry**

The interesting course in Physical Chemistry usually requires pre requisite knowledge of certain mathematical concepts such that the students can master the skills of problem solving and derivations. In the course of General Physical and Inorganic Chemistry, CHE-I.C-1, the students of FYBSc have to learn the unit on 'Mathematical concepts in Chemistry'. As the concepts are usually based on the Higher Secondary Mathematics syllabus, the students who had dropped Mathematics at the 'Higher secondary' level tend to find it difficult to cope up with this unit and overall problem solving and derivations covered under Physical Chemistry.

To help such students to cope up with this gap, a bridge is built by conducting remedial classes for such students such that they can cross the level and understand only those concepts of Mathematics which are required for Physical Chemistry. The derivations also are explained to the students by traditional method on the board taking care that no student directly copies the derivation. After explaining it twice, the students are instructed to do it in their books without looking and I personally supervise the full class and correct them if they go wrong while doing so.

During this Covid 19 pandemic situation, I have shot my personal videos using traditional board method to explain them the derivations and problem solving apart from taking G-meet lecture on the same using power point presentation for better understanding approach.

Positive outcome seen from experience:

- 1) Students who had dropped mathematics at Higher Secondary level feel comfortable and show increased level of confidence with such concepts.
- 2) Overall students understand the derivation better in this manner and inculcates the trick to do the problems or derivation by understanding instead of cramming it.

**Manjita R.Porob MSc, PhD, SET**

**Associate Professor**

**Department of Chemistry**

**Parvatibai Chowgule college of Arts and Science, Autonomous**

**Margao Goa**