Department of Instrumentation and Control
Innovative Teaching Method

Class:	S.E.
Name of Method:	**Working principle of SAR ADC in Microsoft Excel**
Subject:	**Electrical measurements and instrumentation**
Name of Staff	**Mr. V. A. Ahirrao**
Date and Time:	**20/11/2020**
No of students:	**16/30**

Learning Objective:

      To learn step by step working of Successive approximation type of ADC in Excel.

Outcome: On completion students were able to Explain the working of Successive approximation type of ADC.

Description:

Students usually finds it difficult to understand working of Successive approximation type of ADC hence the same is being demonstrated in Microsoft excel and also chart is prepared based on the operation. This may prove to be helpful for students to make use of this by assuming various analog input voltages and verifying step by step working and observe simultaneously changes in excel chart.

Impact of Innovative Method:

      Students may use the shared excel workbook for practicing the SAR ADC working simulation.

      Also, they will understand the use and importance of Excel.

      After an assessment it is observed that 15 out of 16 students have scored 4 or more marks out of 10.

POs and PSOs: PO1, PO5, PO9, PSO1

Screenshots of Innovative Method:

Mr. V. A. Ahirrao

Subject In-charge