

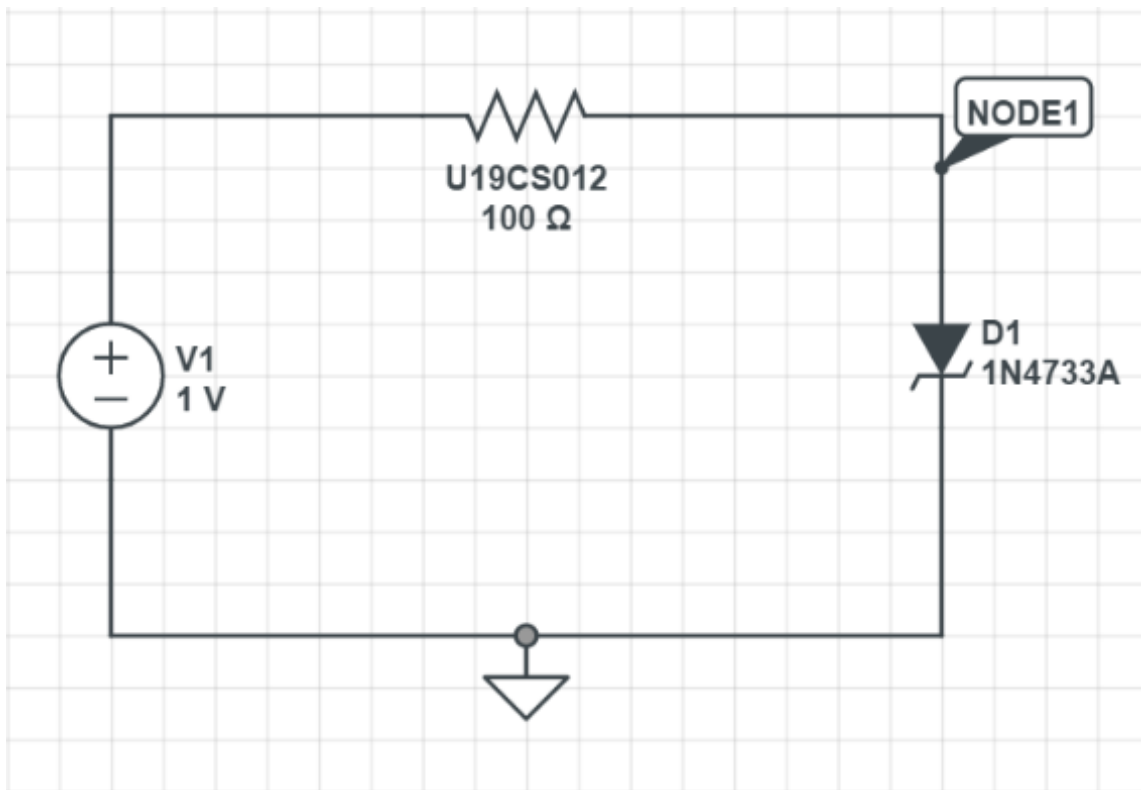
# ASSIGNMENT-5

U19CS012

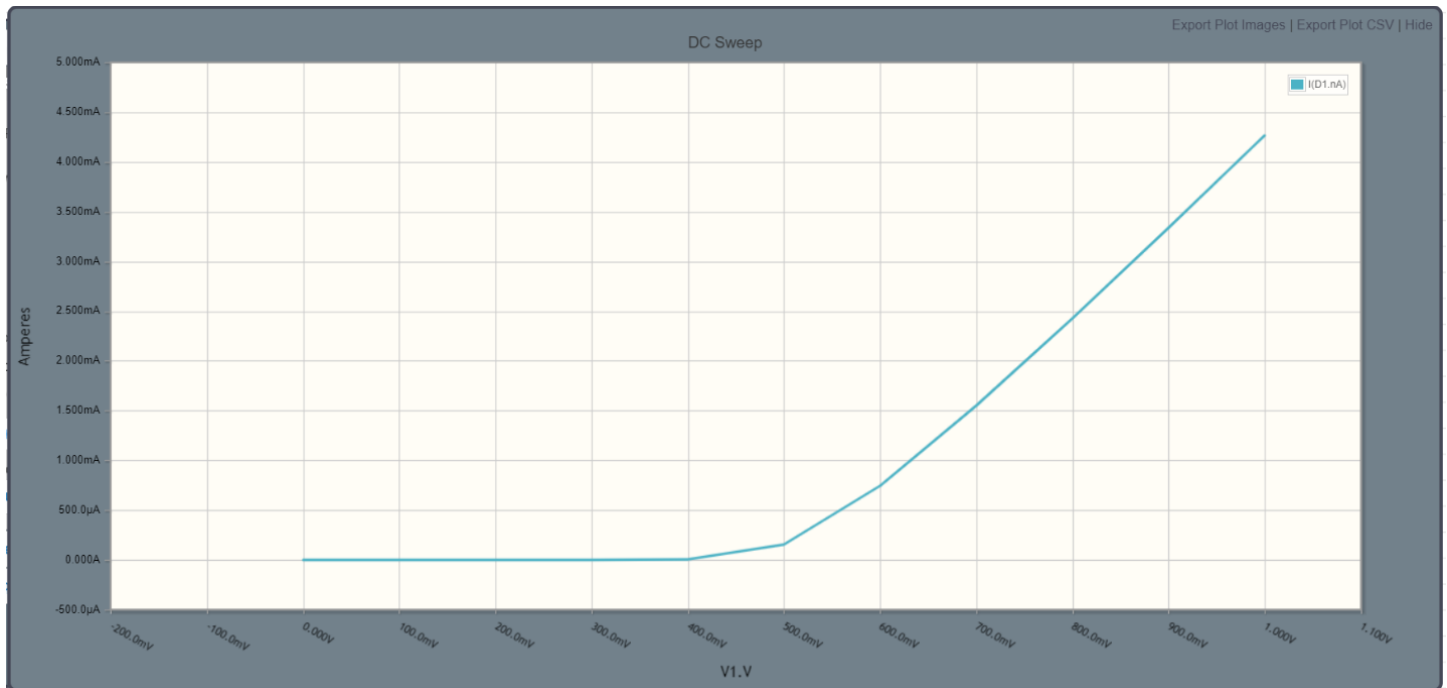
1. Obtain and Plot the forward and reverse characteristics of ZENER Diode in *LabOnline* Simulation Environment.

A.) Forward Characteristics of ZENER Diode

1.) Circuit Image:



## 2.) Graph:

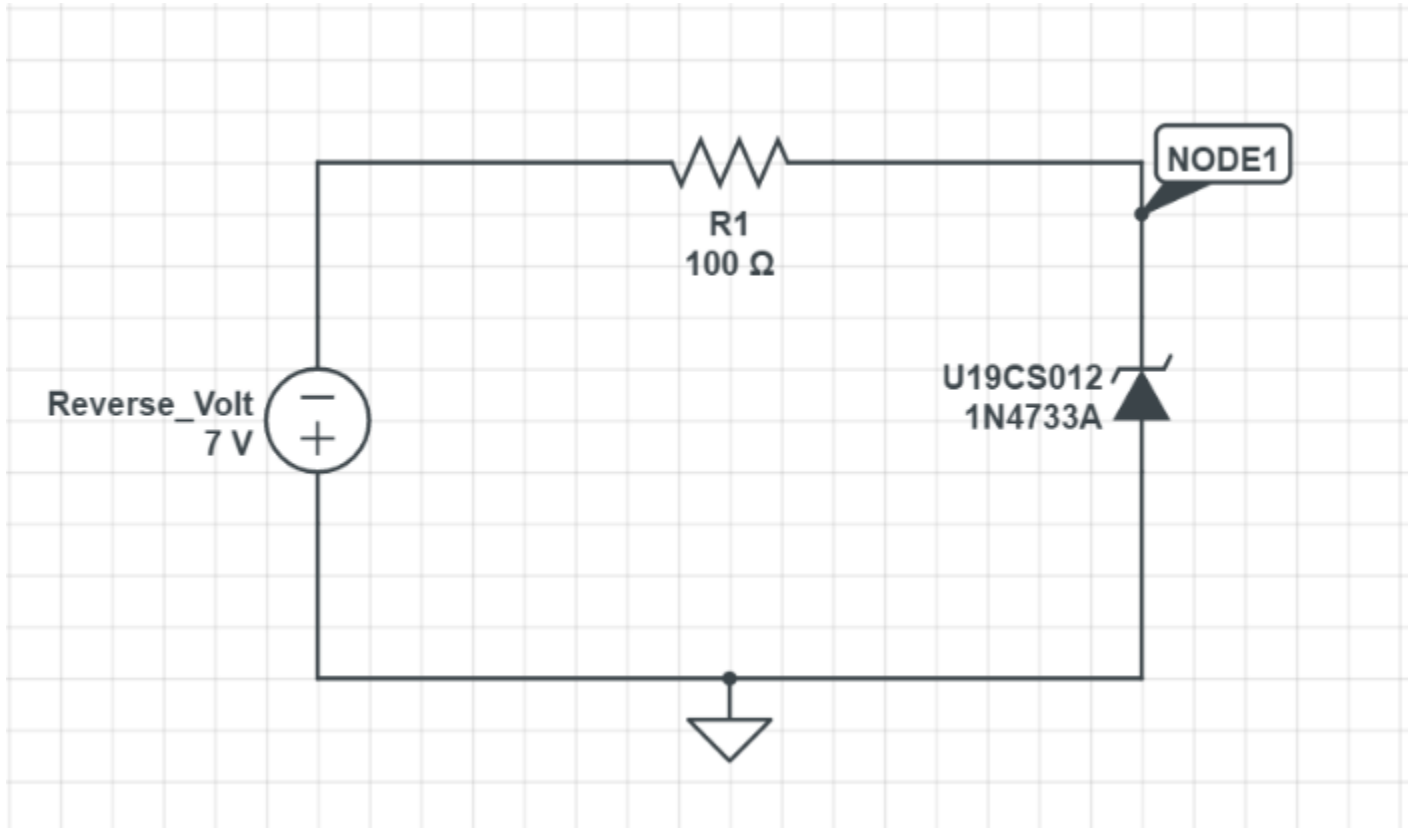


## 3.) Explanation:

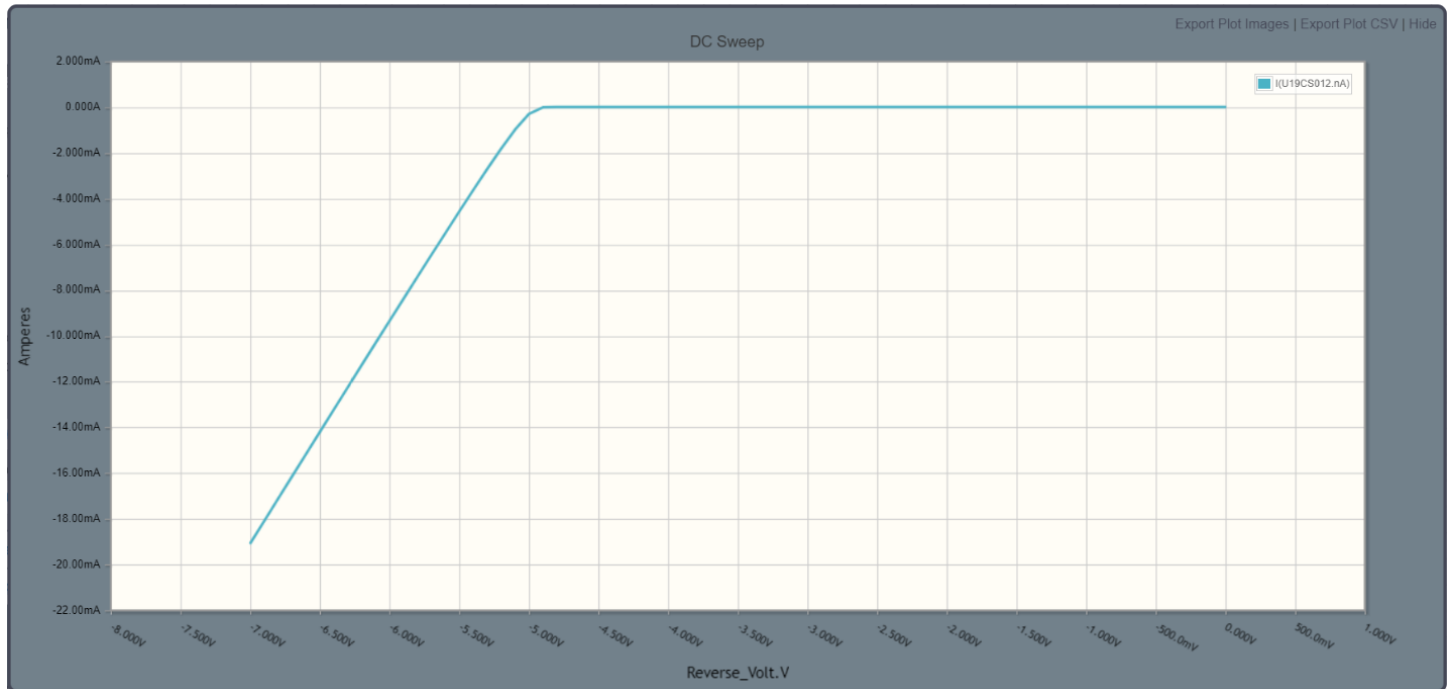
*In Forward Bias, ZENER Diode Follows the Same I-V Characteristic Curve as Simple Diode in Forward Bias. Forward Voltage = 0.5 Volts*

## B.) Reverse Characteristics of ZENER Diode

### 1.) Circuit Image:



## 2.) Graph:



## 3.) Explanation:

In Reverse Bias, ZENER Diode Does not follows the Same I-V Characteristic Curve as Simple Diode in Reverse Bias, Instead a Sharp Drop in Current is observed. This is Called ZENER Breakdown Voltage. Breakdown Voltage = -5 Volts

## C.) Conclusion:

ZENER Diode I-V Characteristics have been Practically Verified through this Simulation with the Theoretical Knowledge. Hence Experiment was Performed Successfully. [Without Error]