

QUESTION - 16.

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Question 16:

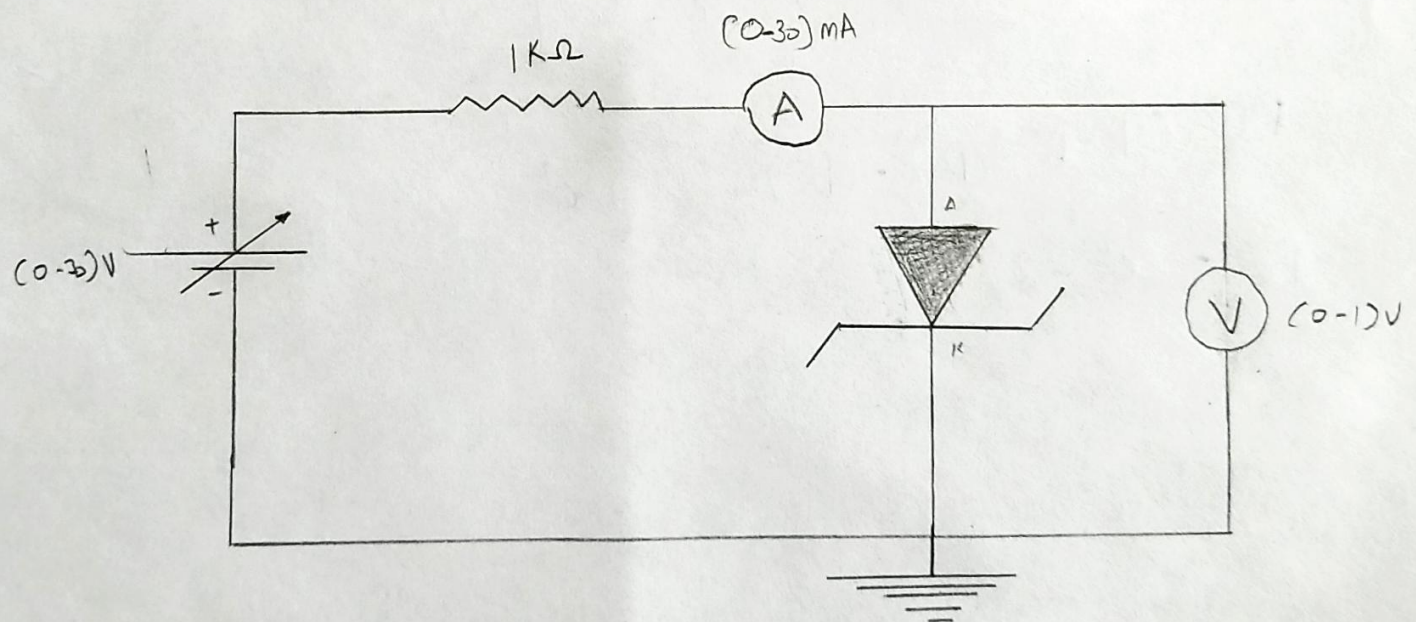
Conduct a Suitable experiment to obtain the Forward bias characteristics of a Zener Diode.

AIM:

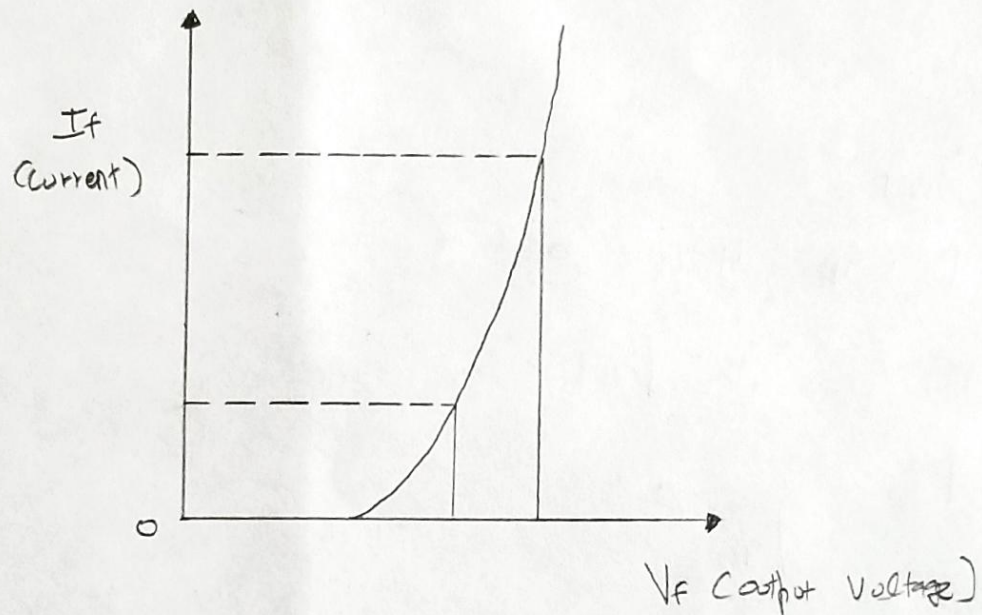
To obtain the Forward bias characteristics of a Zener diode.

CIRCUIT DIAGRAM:

Zener Diode in Forward Bias:



Forward Bias (MODEL GRAPH):



TABULATION:

S.No	Voltage (V)	Current (mA)
1.	0.1	0
2.	0.2	0
3.	0.3	0
4.	0.4	0
5.	0.5	0
6.	0.6	2.09
7.	0.70	14.1
8.	0.71	17.3
9.	0.73	25.2
10.	0.75	36.7

VIVA:

Q. What is the need of Zener Diode?

Zener diodes are used for Voltage Regulation for reference elements, switching applications, clipping circuits and more. The load Voltage equals the breakdown Voltage of the diode.

Q. Give example of Trivalent impurity?

Trivalent impurity atoms have 3 Valence electrons.
Eg: Boron (B), Gallium (Ga) and Aluminium (Al).

RESULT:

The forward bias property / characteristics of the Zener Diode have been studied.

