

G.H.RAISONI COLLEGE OF ENGINEERING AND MANAGEMENT, WAGHOLI PUNE

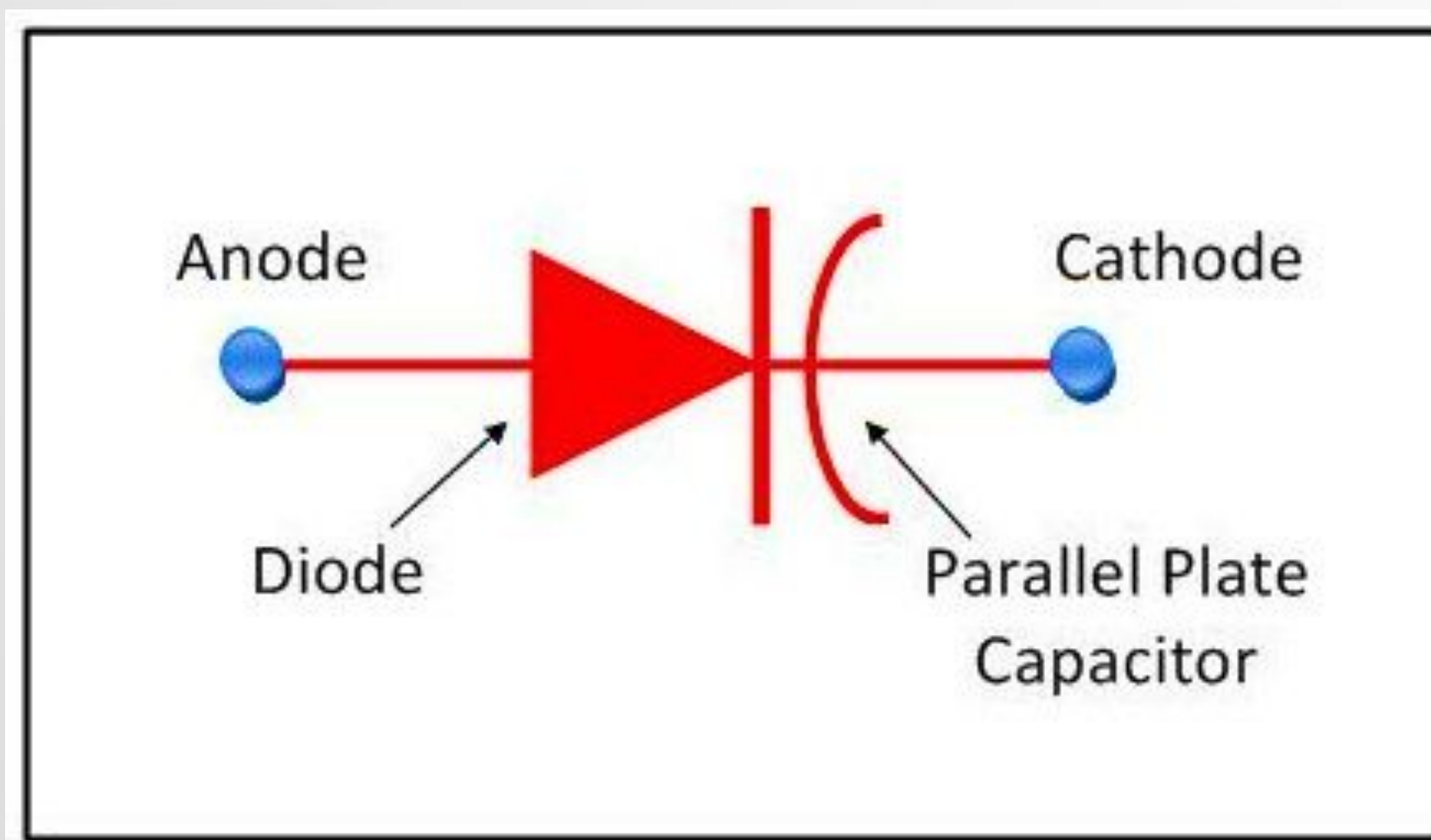
Varactor Diode

Definition:

The diode whose internal **capacitance** varies with the variation of the reverse voltage such type of diode is known as the Varactor diode.

It is used for storing the charge. The varactor diode always works in reverse bias and it is a voltage-dependent **semiconductor** device.

The varactor diode is used in a place where the variable capacitance is required, and that capacitance is controlled with the help of the voltage.

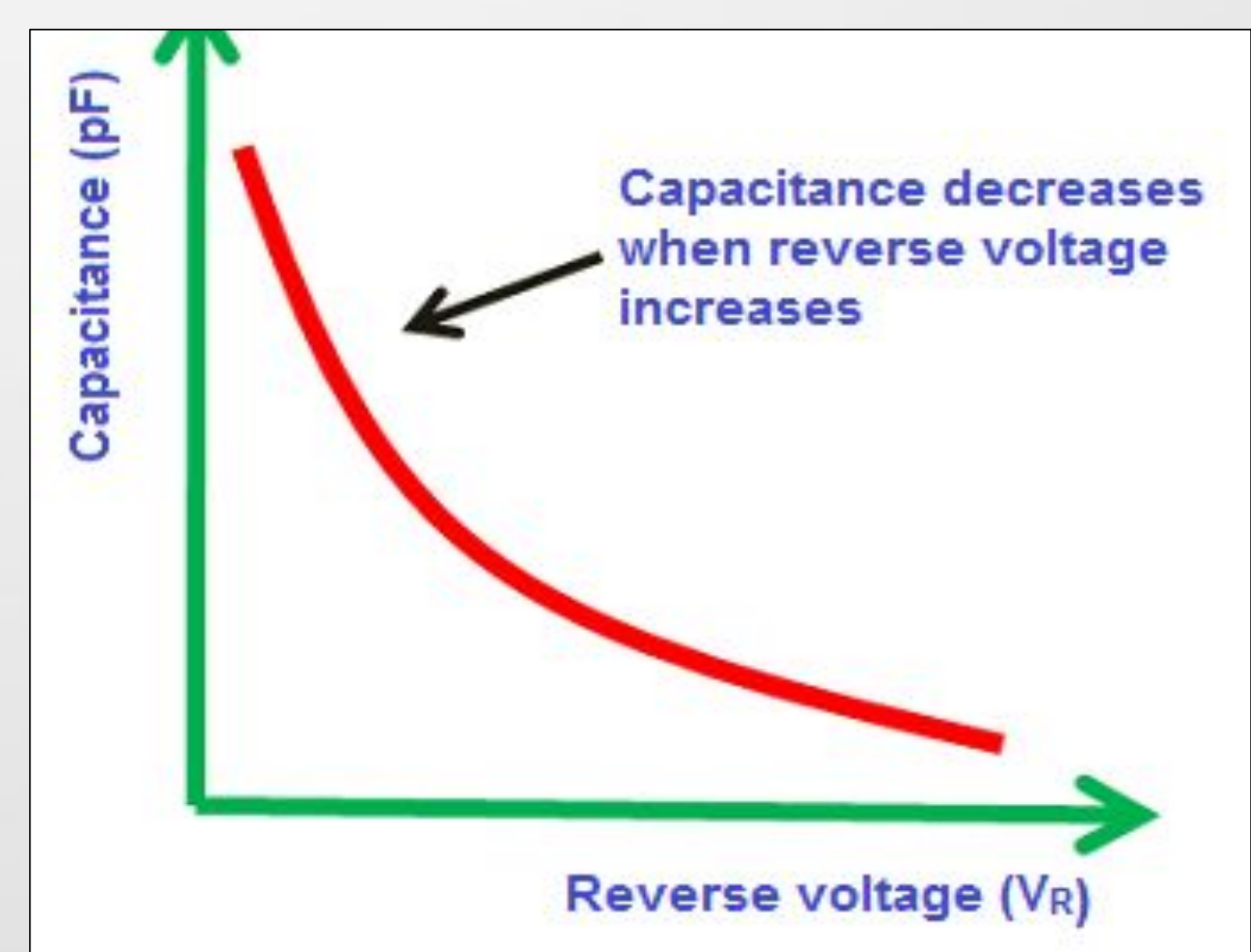


Symbol of Varactor Diode

The symbol of the varactor diode is similar to that of the PN-junction diode. The diode has two terminals namely anode and cathode. The one end of a symbol consists the diode and their other end has two parallel lines that represent the conductive plates of the capacitor. The gap between the plates shows their dielectric.

Characteristic of Varactor Diode

The characteristic curve of the varactor diode is shown in the figure below. The graph shows that when the reverse bias voltage increases the depletion region increases, and the capacitance of the diode reduces.



Advantages of Varactor Diode

1. The varactor diode produces less noise as less compared to the other diode.
2. It is less costly and more reliable.
3. The varactor diode is small in size and less in weight.

G.H.Raisoni College of Engineering and Management,Wagholi Pune,412207					
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TAE Assesment Sheet for FY Btech					
SR.NO	ROLL NO	DIVISION	NAME OF THE STUDENT	TAE NO	POSTER/PRESENTATION
1	A69	A	Soham Yugraj Tiwari	1	Poster
2	A70	A	Amaan Ayyub Nalband		
3	A71	A	Shravan Vijaypratap Singh		
4	A72	A	Pratik Rajesh Jade		
Rubrics For Assesement					
CATEGORY	Contents	Presentation	Spelling and pronunciation	Oral Presentation	TOTAL
MARKS	2	1	1	1	5
			Teacher sign (With name and date)		