	RAMAKRISHNA MISSION VIDYAMANDIRA (Residential Autonomous College affiliated to University of Calcutta)							
	FIRST YEAR [2016-19] B.A./B.Sc. FIRST SEMESTER (July – December) 2016 Mid-Semester Examination, September 2016							
Date	: 17/09	9/2016	ELECTRONICS (General)					
Time	e : 12 no	oon – 1 pm	Paper : I	Full Marks : 25				
1.	Define	Conductor,	Semiconductor, and Insulator with examples.	[6]				
2.	State and explain the V-I Characteristics of a PN Junction Diode. [3+6]							
3.	a) A l sec	ondary win mary to secc The dc lad The dc vol The ripple The rectifi The TUF	Rectifier uses a junction Diode of Forward resistance 2 ohm, a transfo ding resistance 4 ohm and a load resistance of 100 ohm. If the tran ondary ratio is 20:1 and 220 V, 50 Hz ac is applied to the primary find — I current Itage across the load	sformer				
	b) Dra	aw and expla	ain the working Principle of a Zener Diode.	[10]				

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1.	Define Conductor, Sem	iconductor, and Insulator with examples.	[6]				
2.	State and explain the V	-I Characteristics of a PN Junction Diode.	[3+6]				
3.	Answer <u>any one</u> questi	on :	[10]				
	 a) A Half Wave Rectifier uses a junction Diode of Forward resistance 2 ohm, a transformer of secondary winding resistance 4 ohm and a load resistance of 100 ohm. If the transformer primary to secondary ratio is 20:1 and 220 V, 50 Hz ac is applied to the primary find — The dc lad current The dc voltage across the load The ripple factor The rectification efficiency 						

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- v) The TUF
- vi) The PIV of the Diode
- b) Draw and explain the working Principle of a Zener Diode.

[10]