

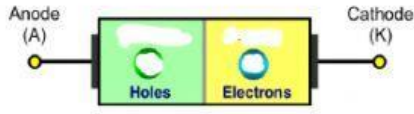
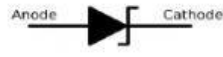
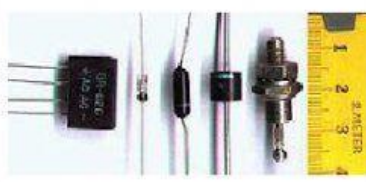
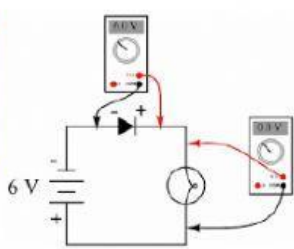
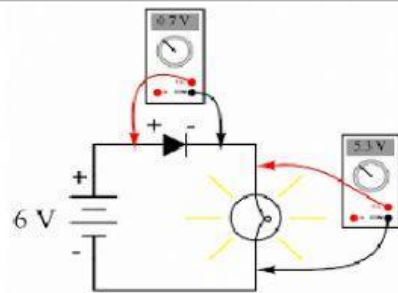
Grade	12 AEE	Subject	Term 3- Electronics Principles and App. AEE70
Name		ID	
Section	01	Date	W1-WS1

Answer all questions

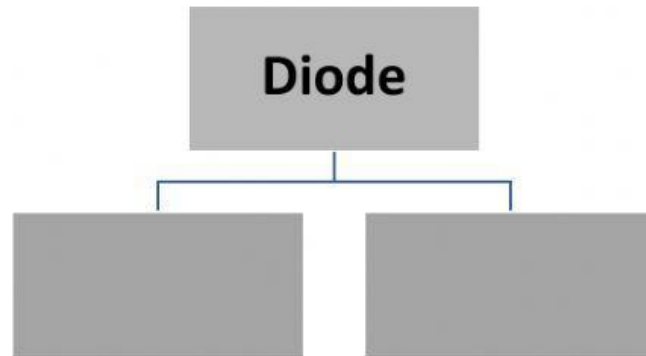
Q1) Diode structure, types and symbols.

Copy the letter, symbol or word from the list to its correct place.

Diode symbol, Diode structure, A, K, Cathode, P-Type, N-type, +, -, Photo diode, Rectifier diode, Zener diode symbol, Zener diode, Diode packaging, forward biased diode, Reverse diode, low poer diode, Light emitting diode

		
Typical diode		
		
		
		

Q2) Complete the chart with diode classifications according to semiconductor types.



Q3) Use JEDEC coding to identify the characteristics of the following diodes as per the example.

Code	First number	Second letter	Subsequent numbers
1N4001	1= Diode	N= Semiconductor	4001
1N4728A			
2N2222			

Q4) Use Pro-Electron coding to identify characteristics of the following diodes as per the example.

Code	Semiconductor material	Diode type	Serial number	Voltage Rating
BZY74-C6V3	B= Silicon	Z = Zener	Y74 = Industrial	6.3 V
AAAY74				-
BZY74-C3V3				

Q5) Match Diode testing circuit with its characteristics.

#	Circuit	#	Results
1			- Forward direction test. As Red(+ve) lead is connected to A and Black (-ve) lead is connected to K. - The test will measure the internal resistance of the diode. - Typical reading is <10 ohms for good diodes. And 0.3V for Ge and 0.7 for Si diode when tested by Digital Multimeter.
2			- Reverse direction test. As Red(+ve) lead is connected to K and Black (-ve) lead is connected to A. - The test will measure the internal resistance of the diode. - Typical reading is >1000M ohms for good diodes. And 1 or OL when tested by Digital Multimeter

