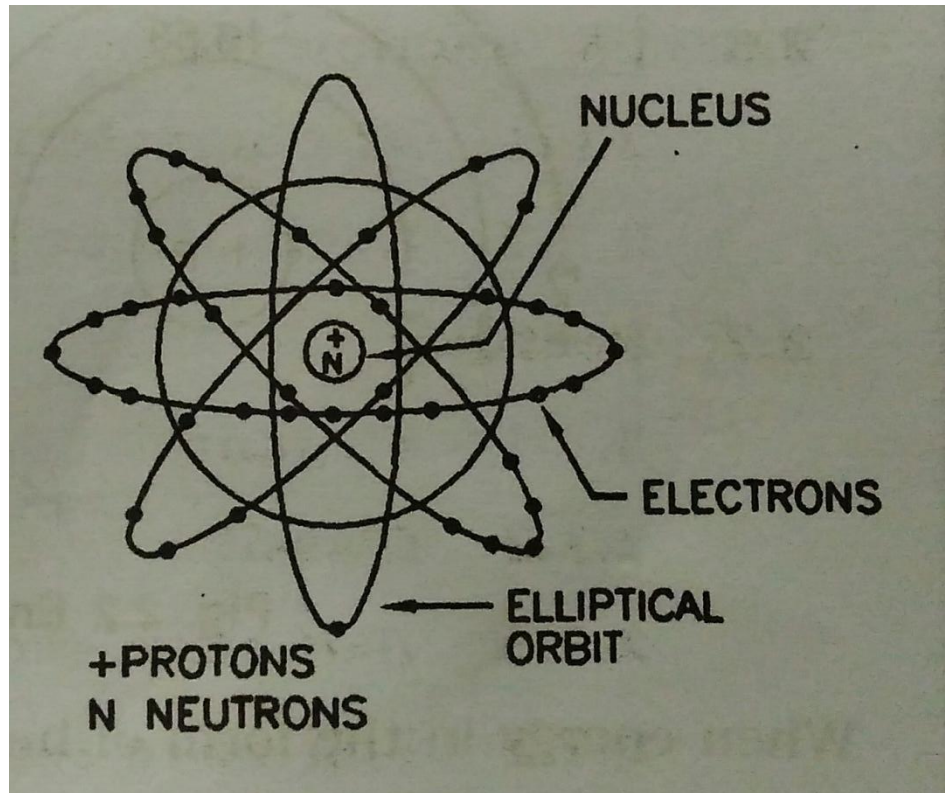


BASIC ELECTRONICS

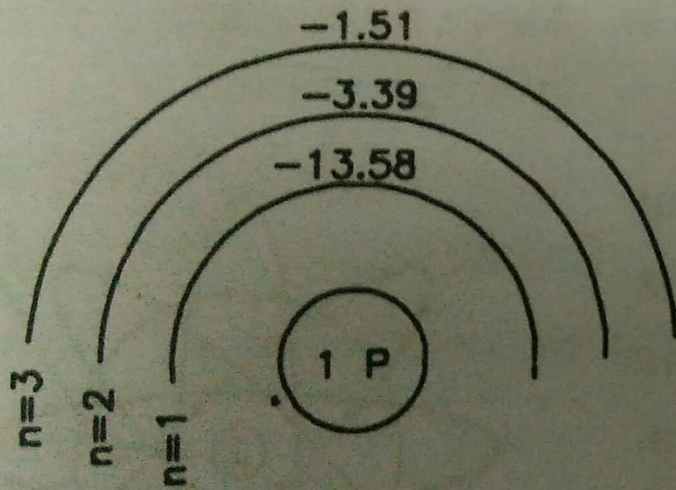
(3320701)

Diode and Its
Applications

ATOMS AND ITS STRUCTURE



ENERGY LEVELS



ELECTRON TOTAL ENERGY

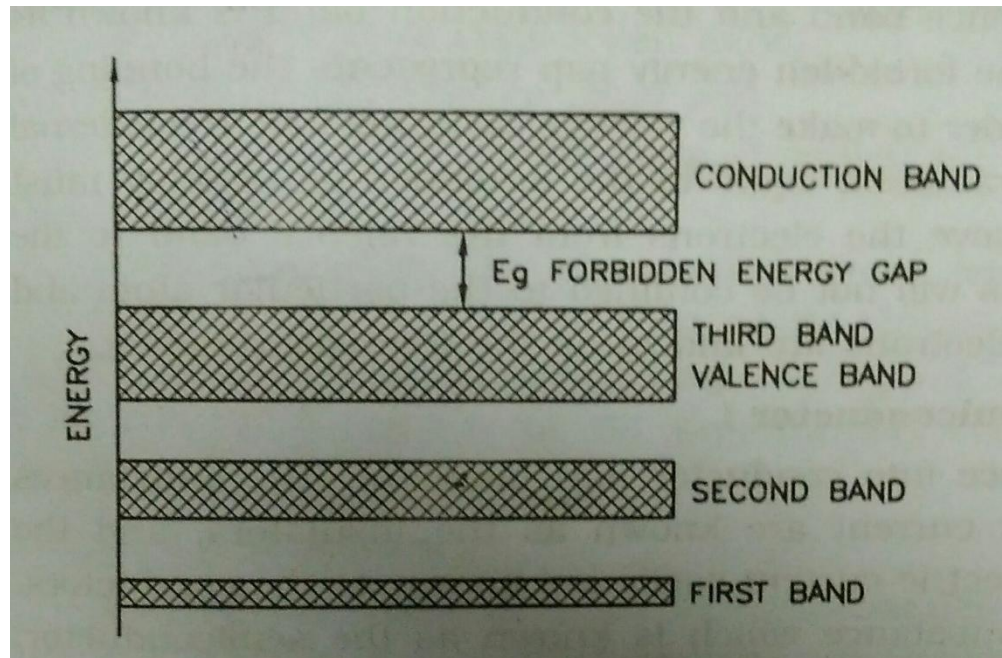
THIRD LEVEL $n=3$

SECOND LEVEL $n=2$

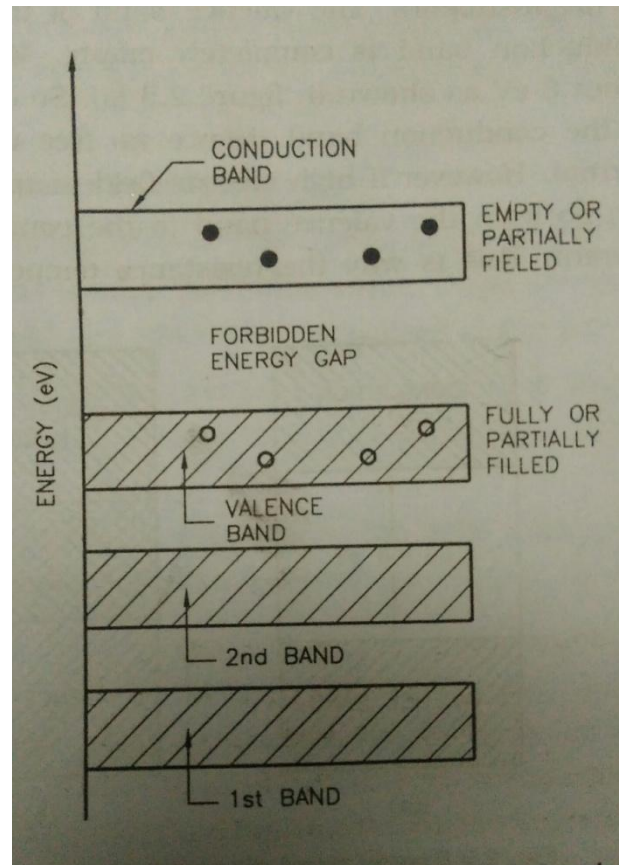
FIRST LEVEL $n=1$

EDGE OF NUCLEUS

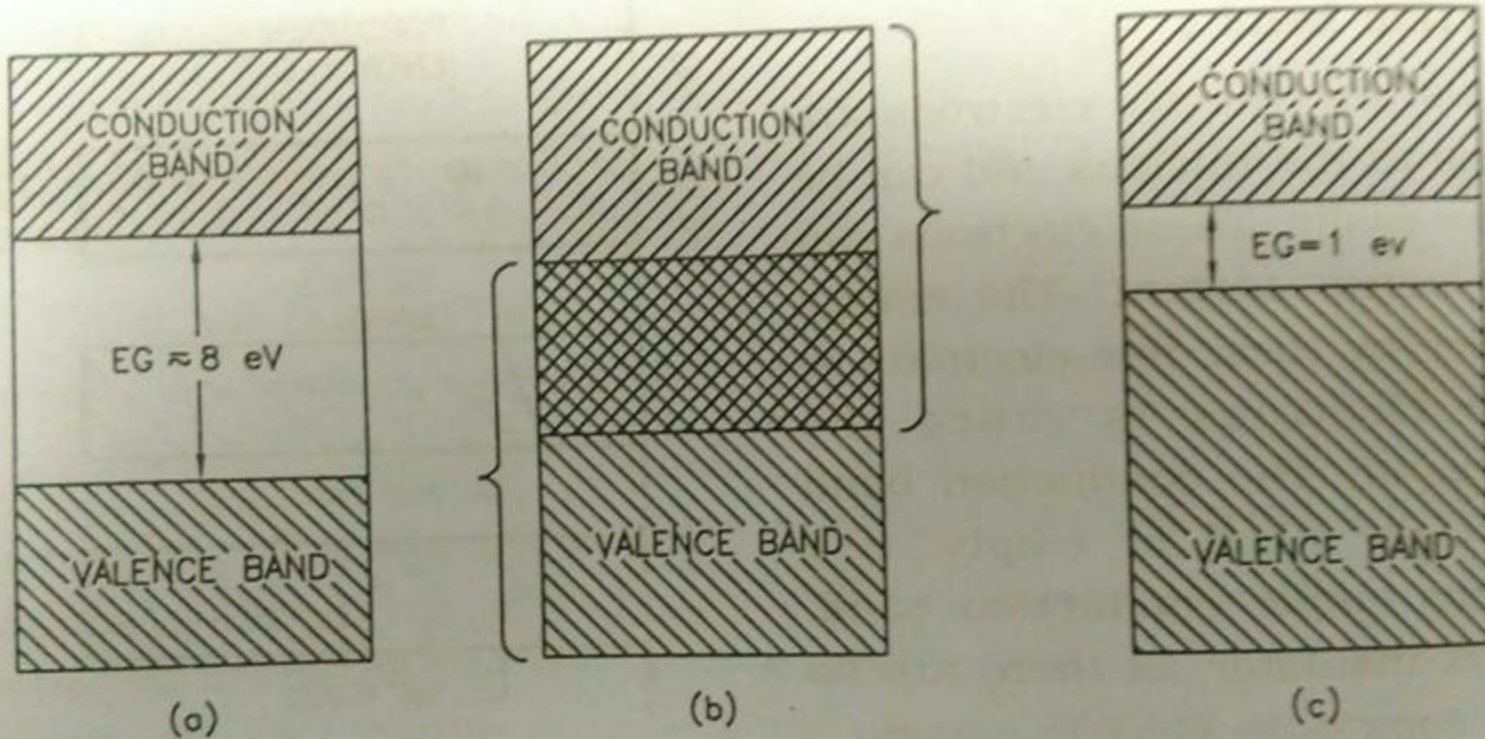
ENERGY BANDS



VALENCE, CONDUCTION AND FORBIDDEN ENERGY GAPS

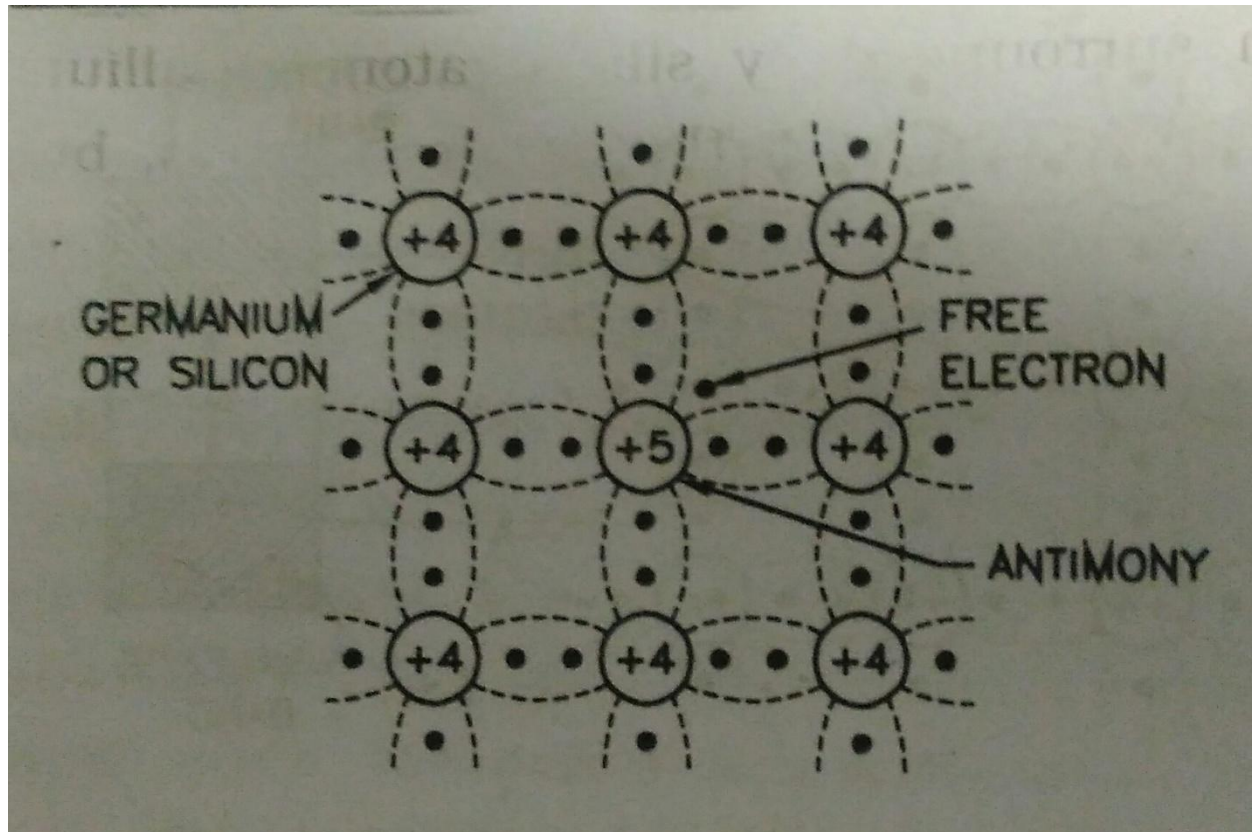


CONDUCTORS, SEMICONDUCTORS AND INSULATORS

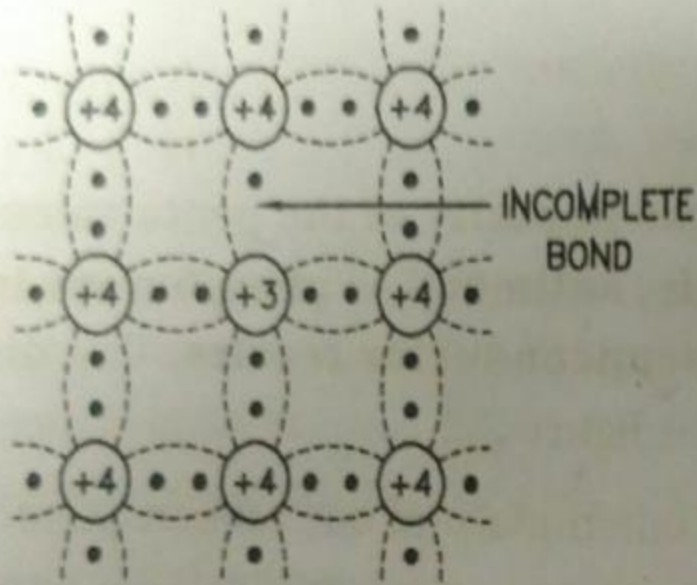


Energy band diagrams (a) insulator, (b) conductor and (c) semiconductor

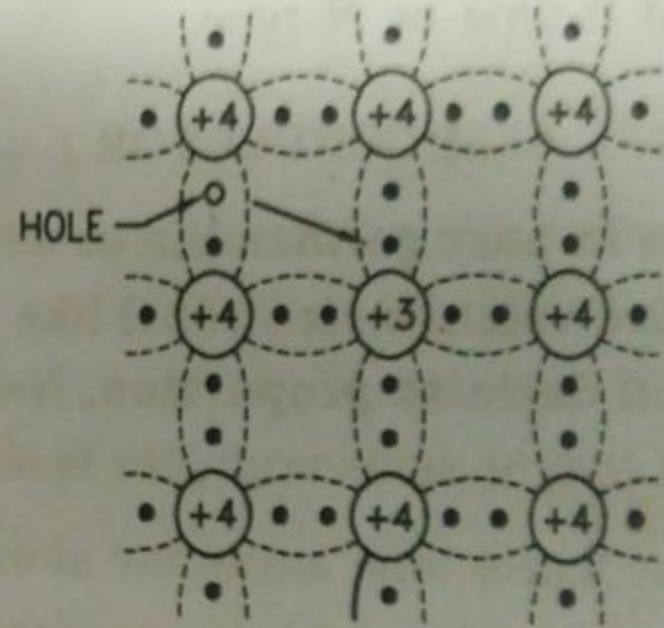
N-TYPE SEMICONDUCTOR



P-TYPE SEMICONDUCTOR

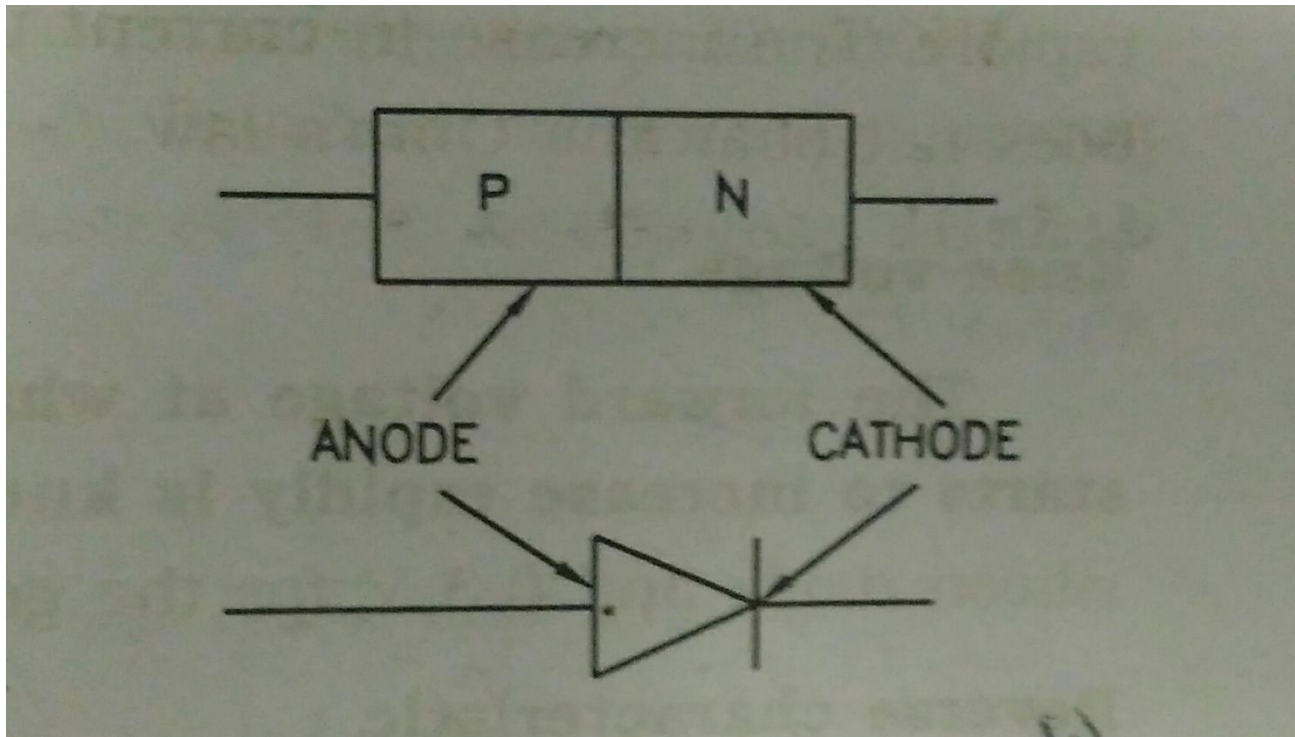


P-type semiconductor—gallium
added to silicon

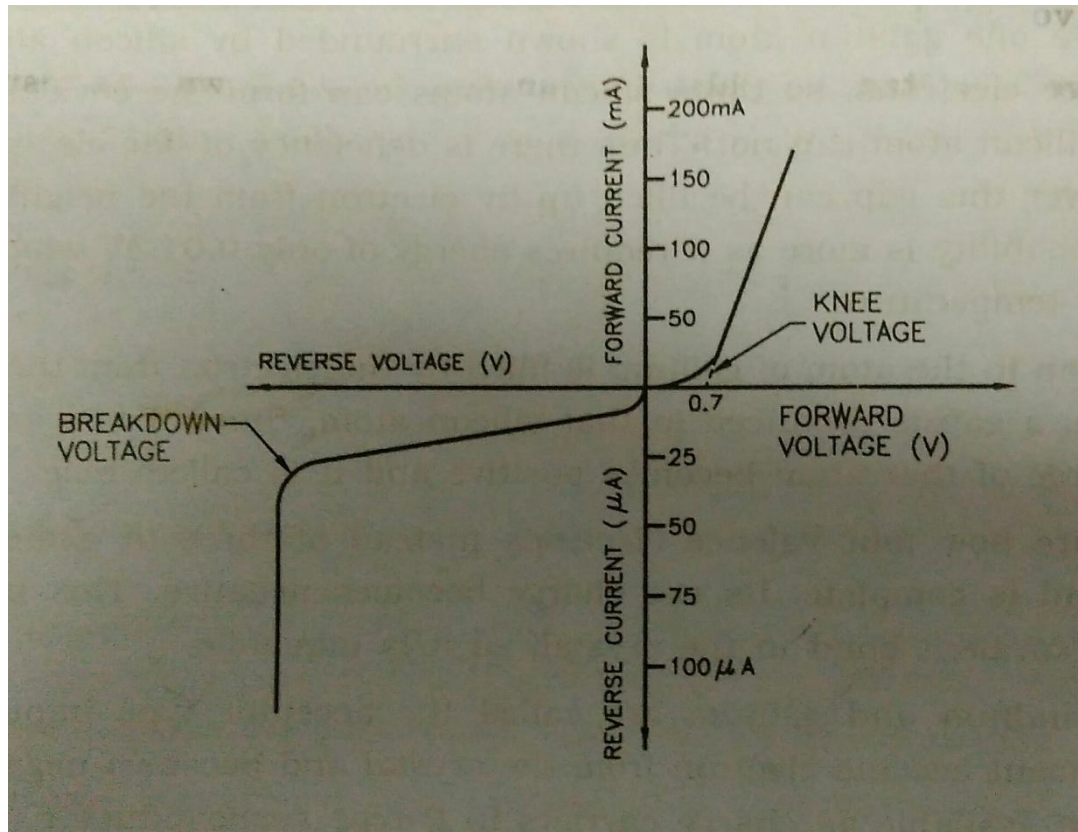


Creation of hole

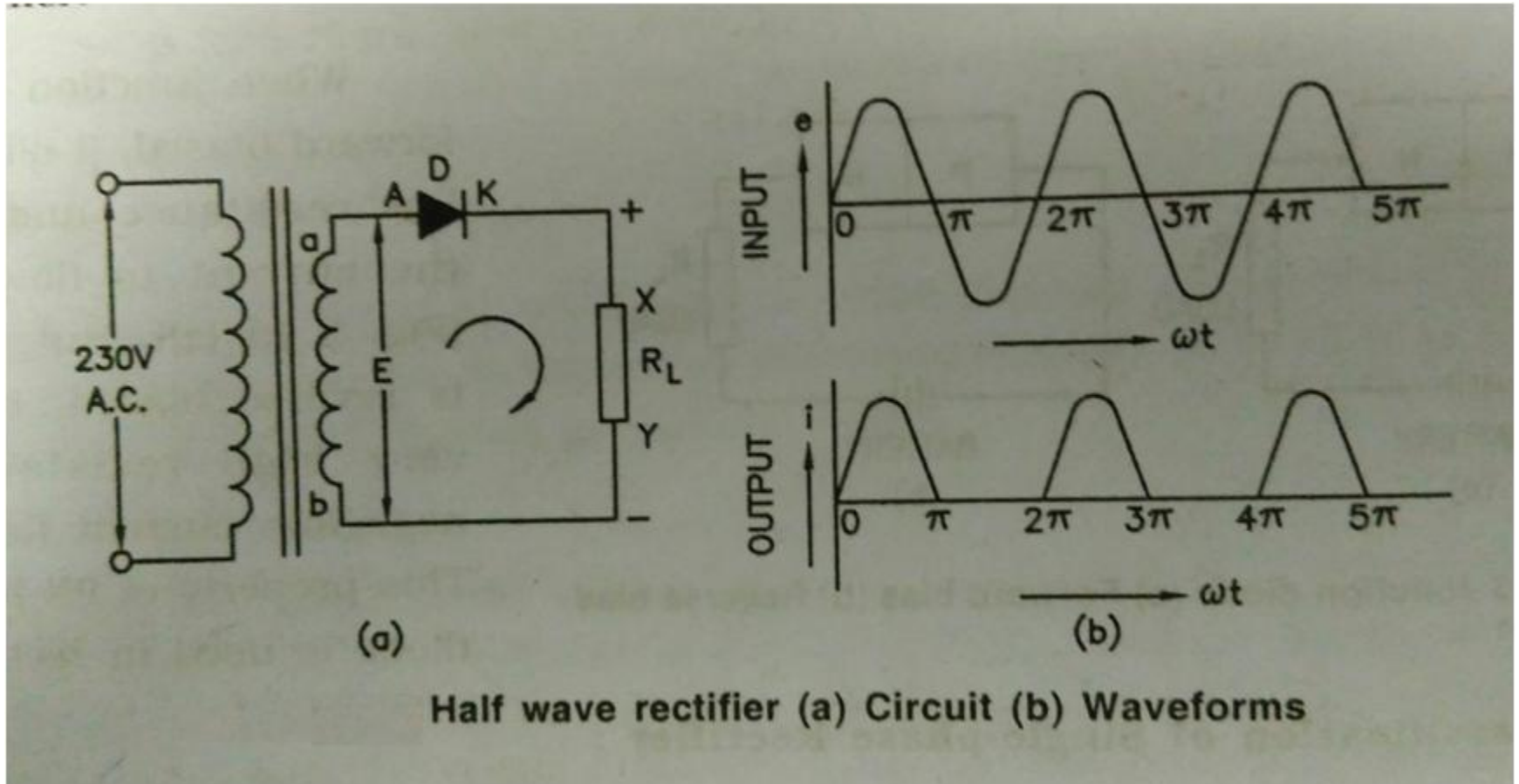
PN – JUNCTION DIODE



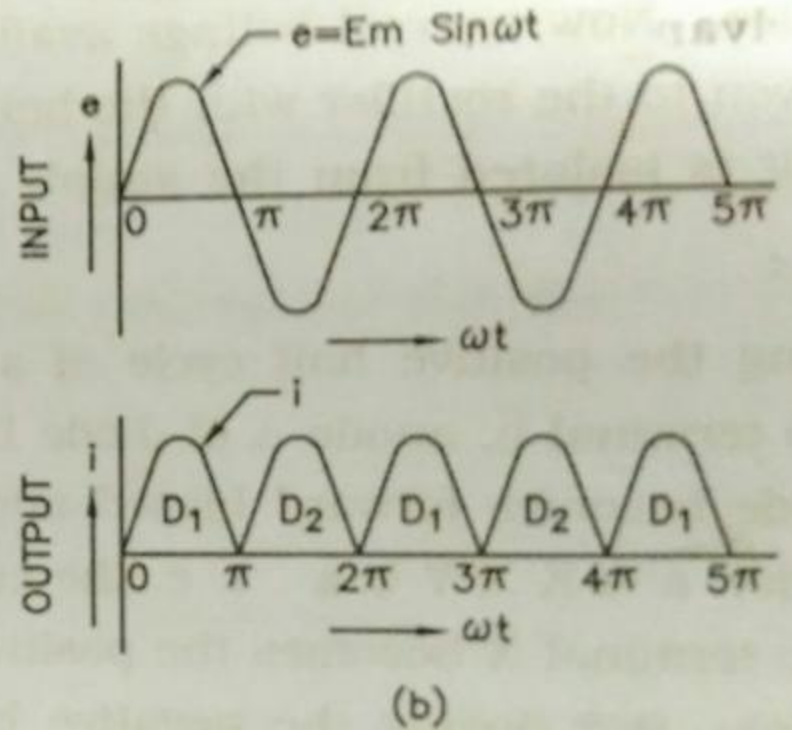
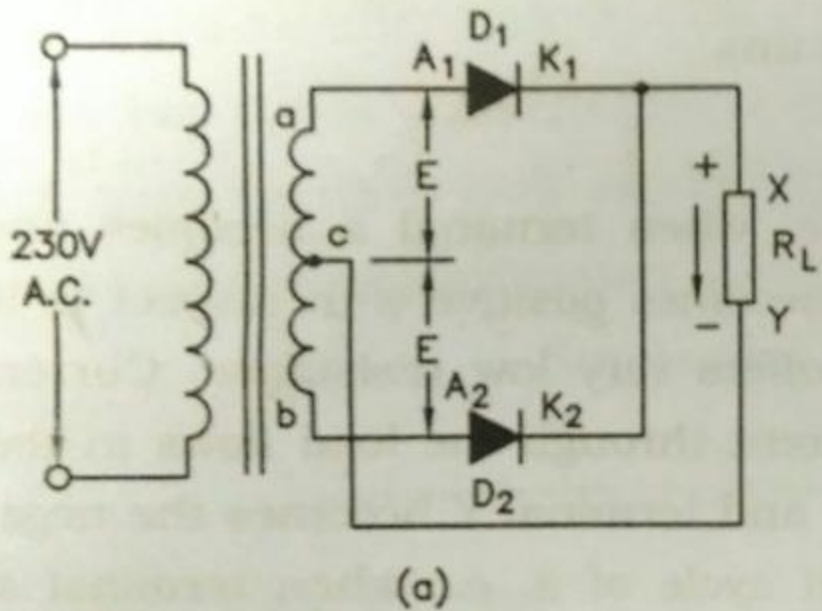
VI - CHARACTERISTICS



HALF WAVE RECTIFIER

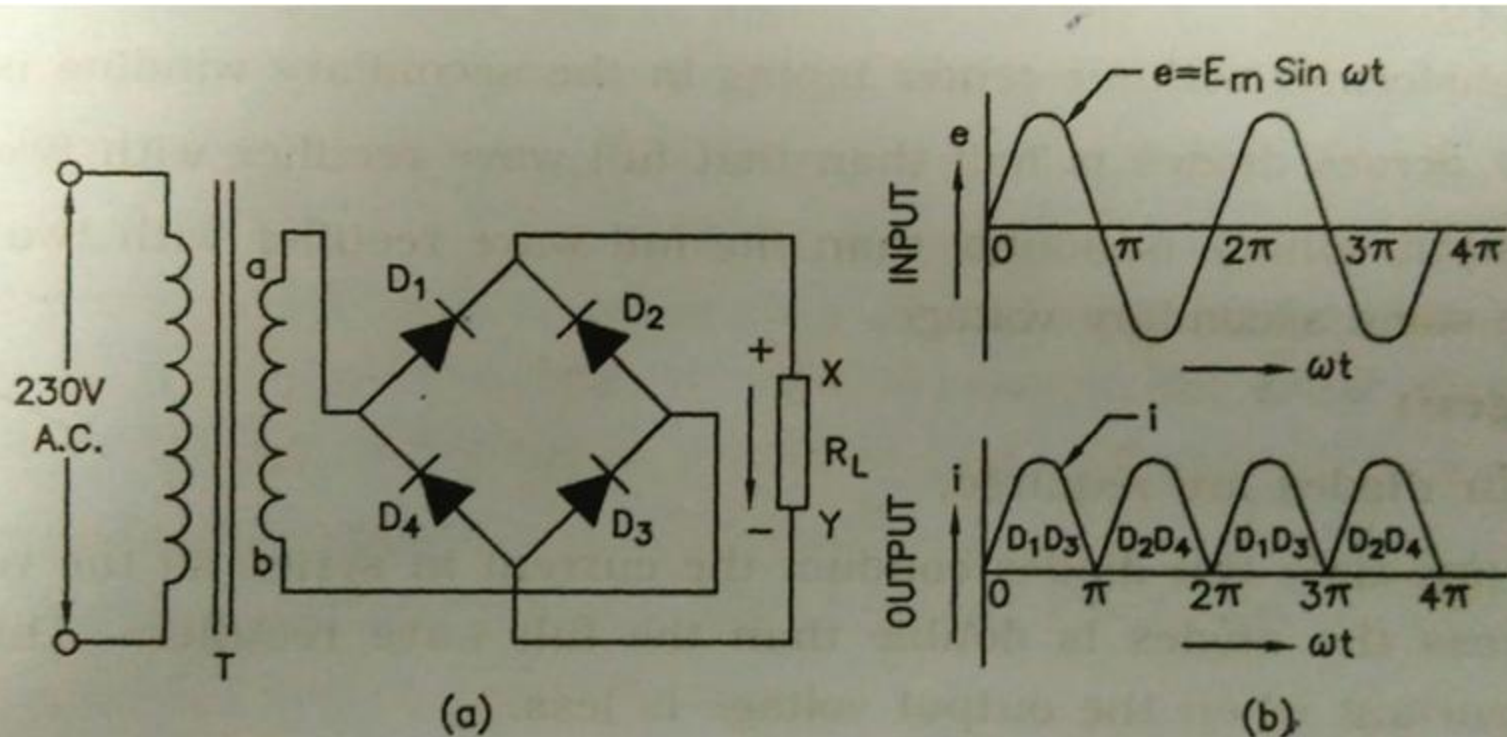


FULL WAVE RECTIFIER



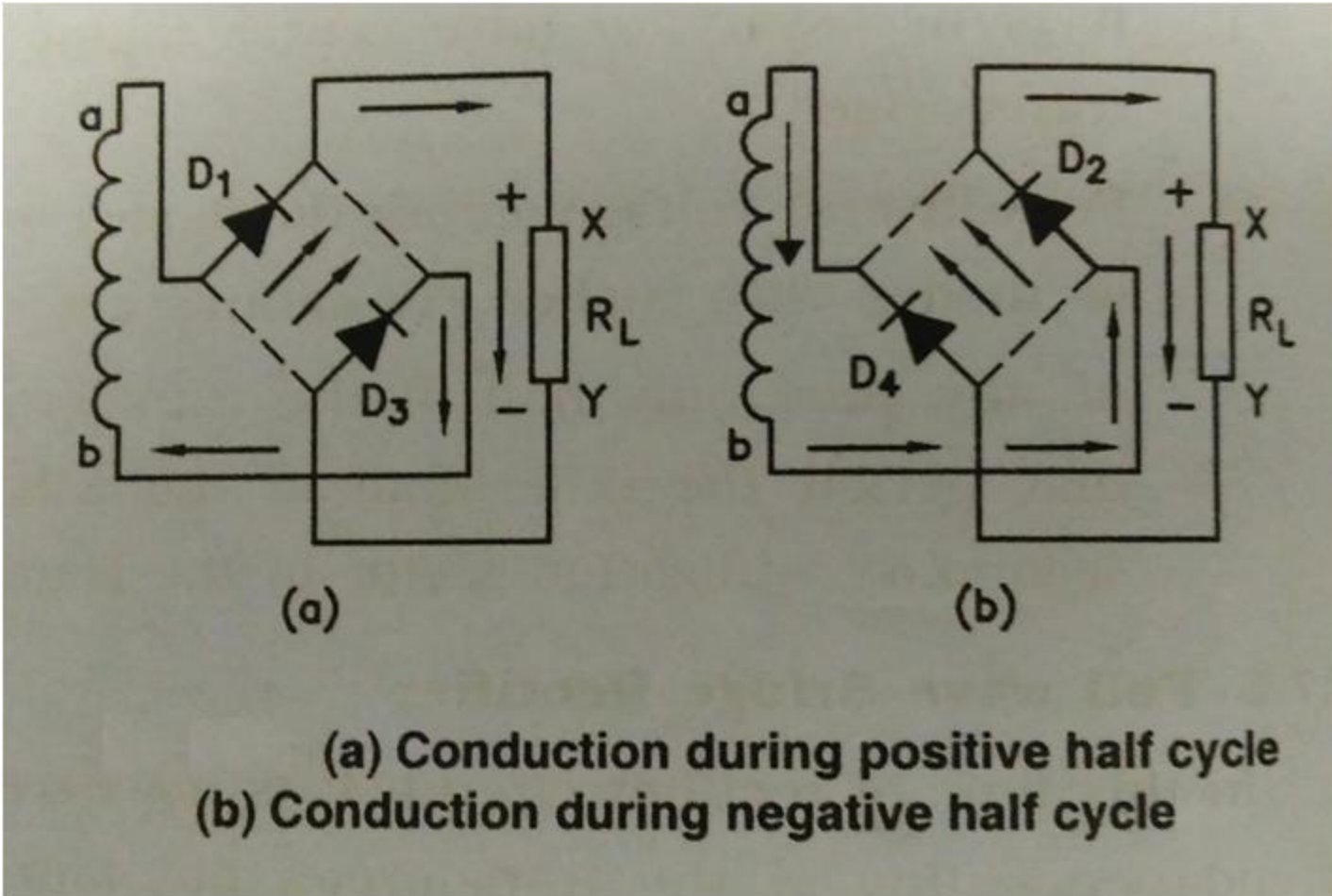
Full wave rectifier (a) Circuit (b) Waveforms

FUL WAVE BRIDGE RECTIFIER

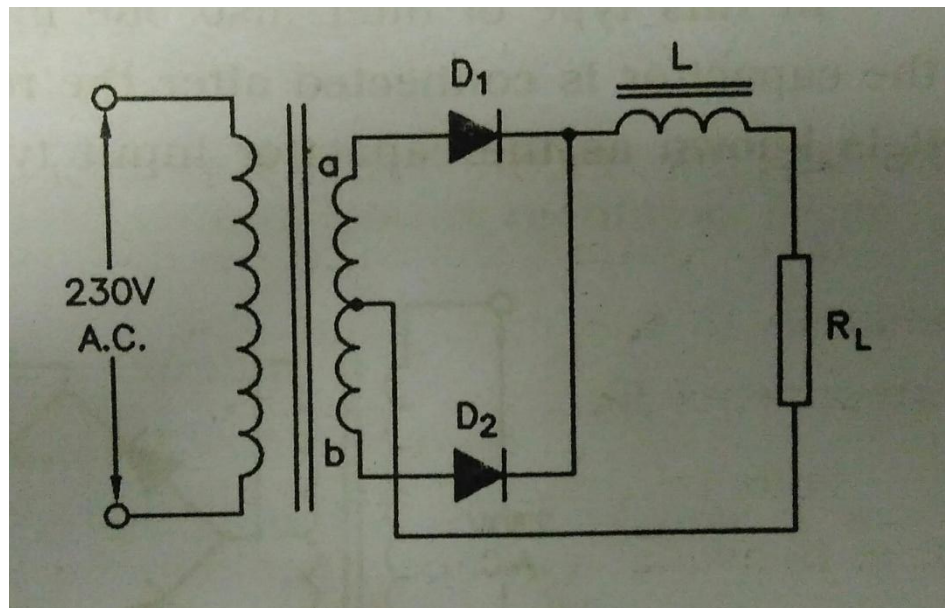


Full wave bridge rectifier (a) Circuit (b) Waveforms

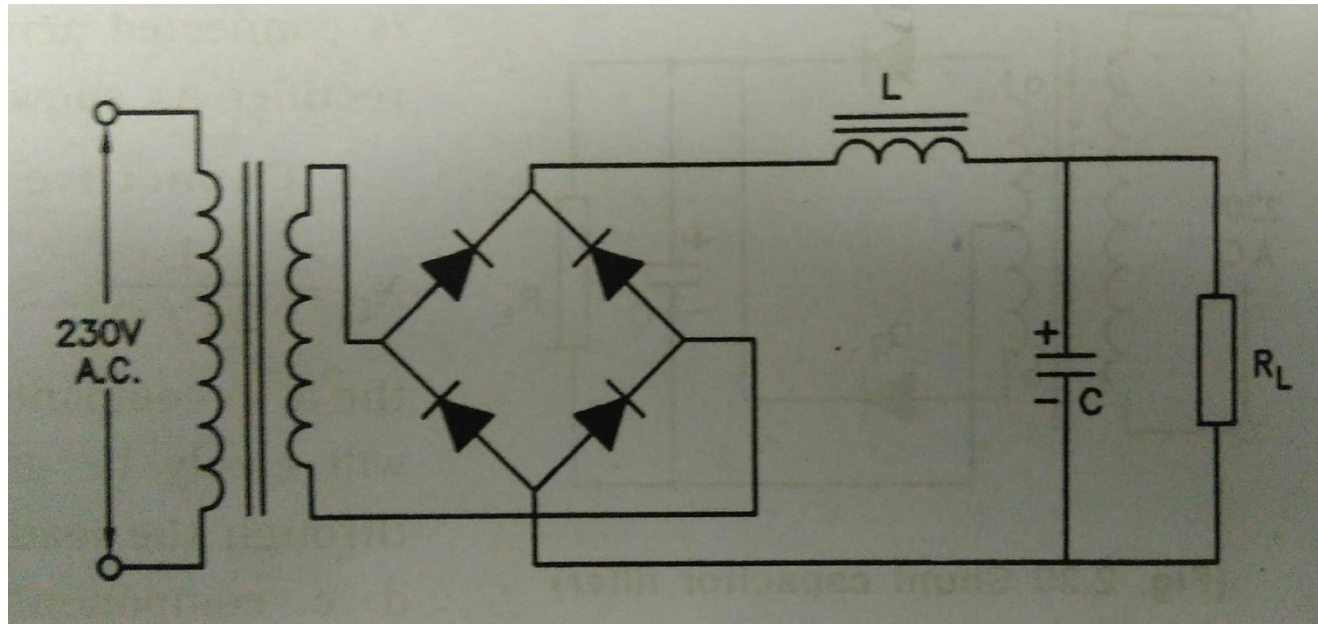
FULL WAVE BRIDGE RECTIFIER CONDUCTION



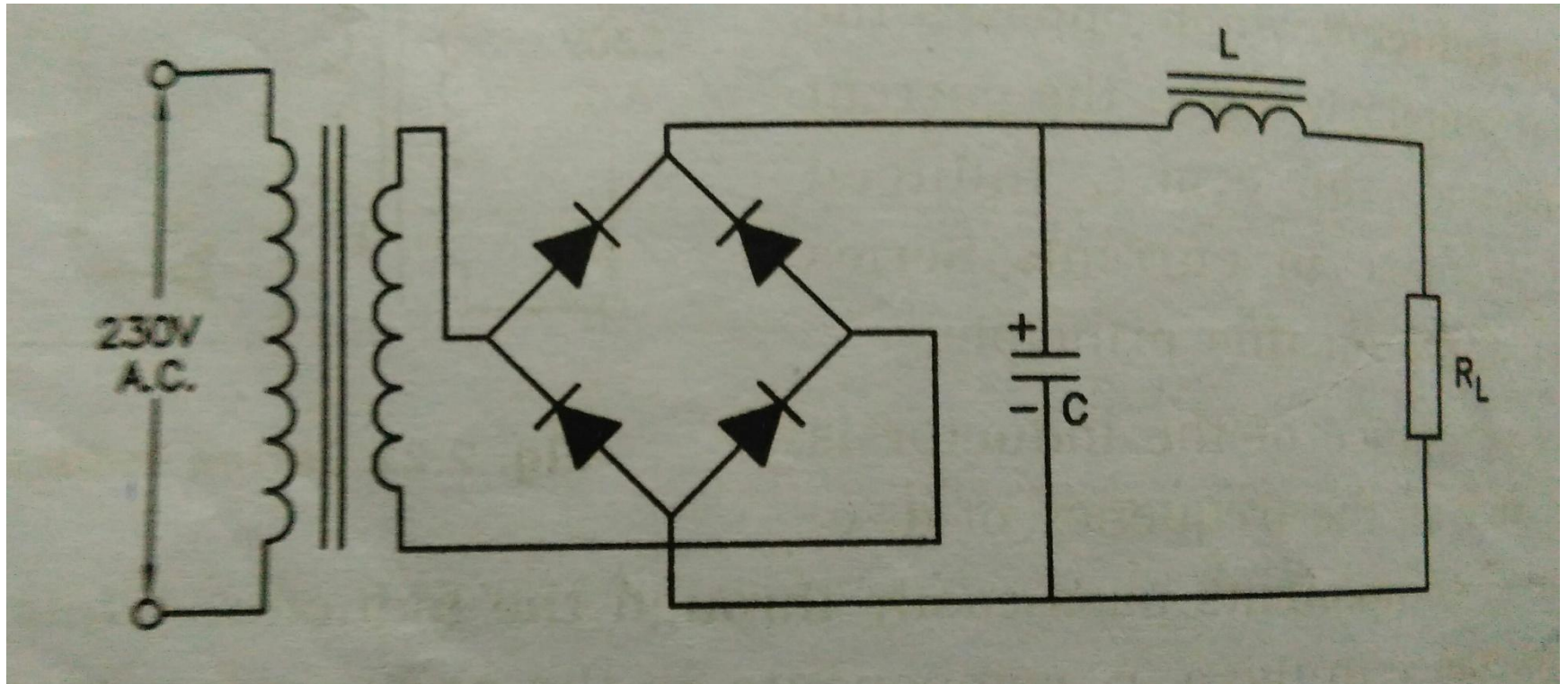
FILTER(SERIES INDUCTOR)



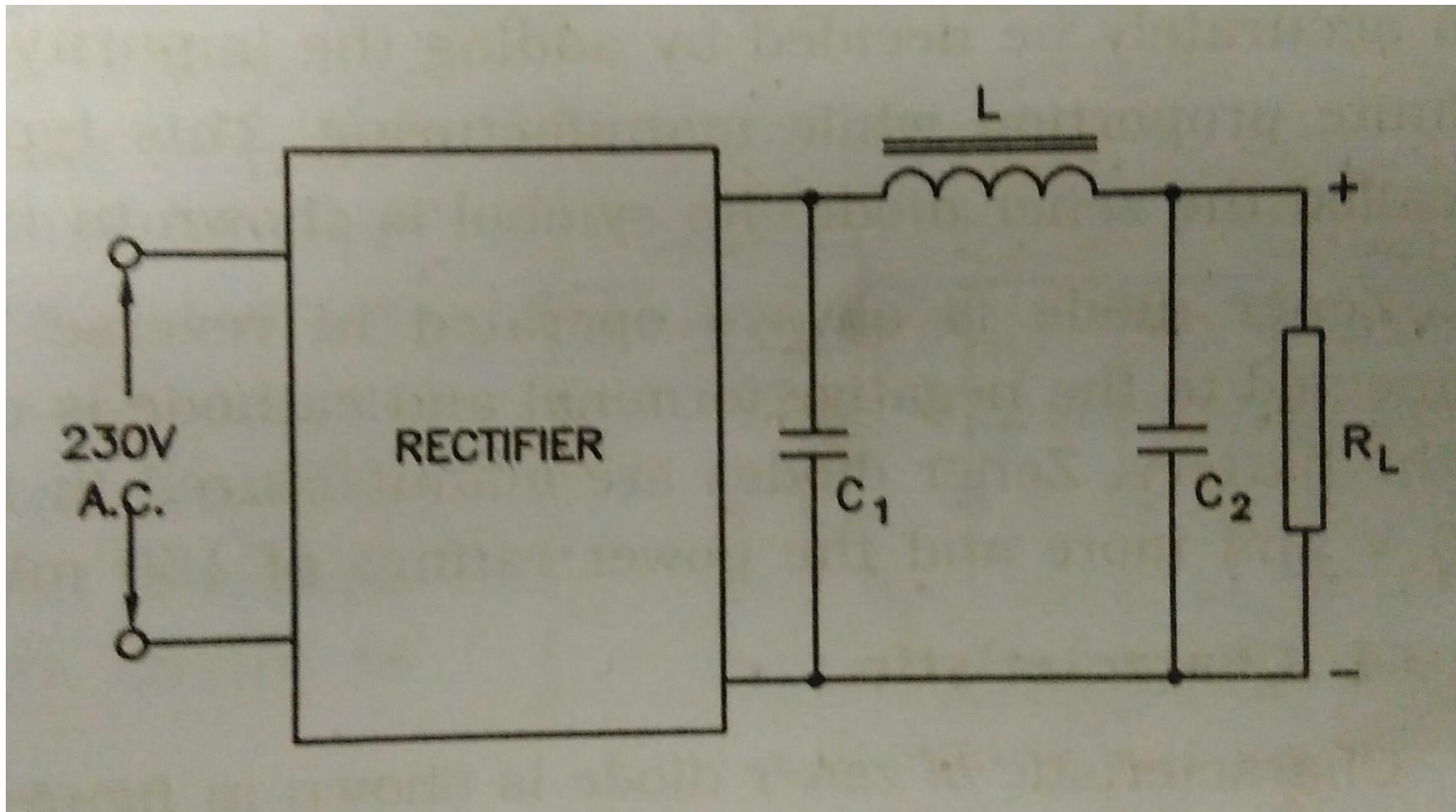
FILTERS(CHOKE INPUT LC)



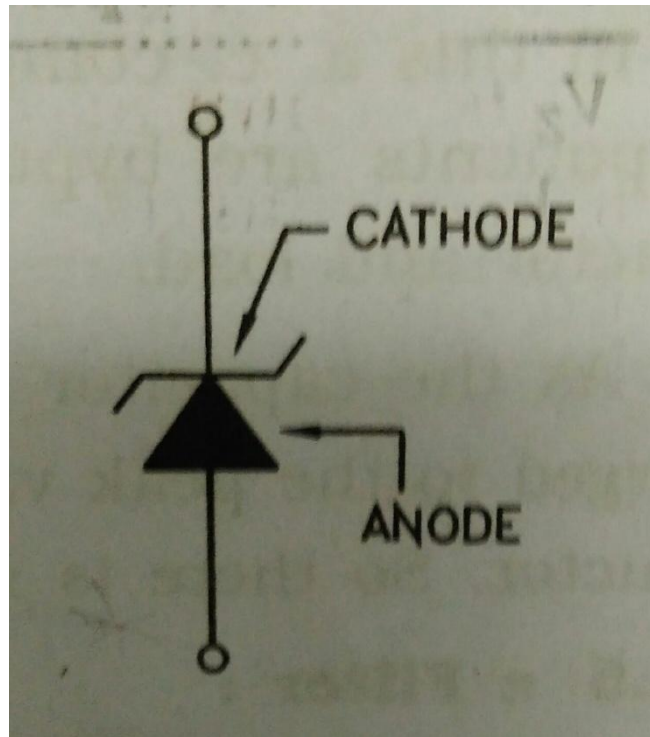
FILTERS(CAPACITOR INPUT LC)



FILTERS(π)



ZENER DIODE



VI CHARACTERISTICS OF ZENER DIODE

