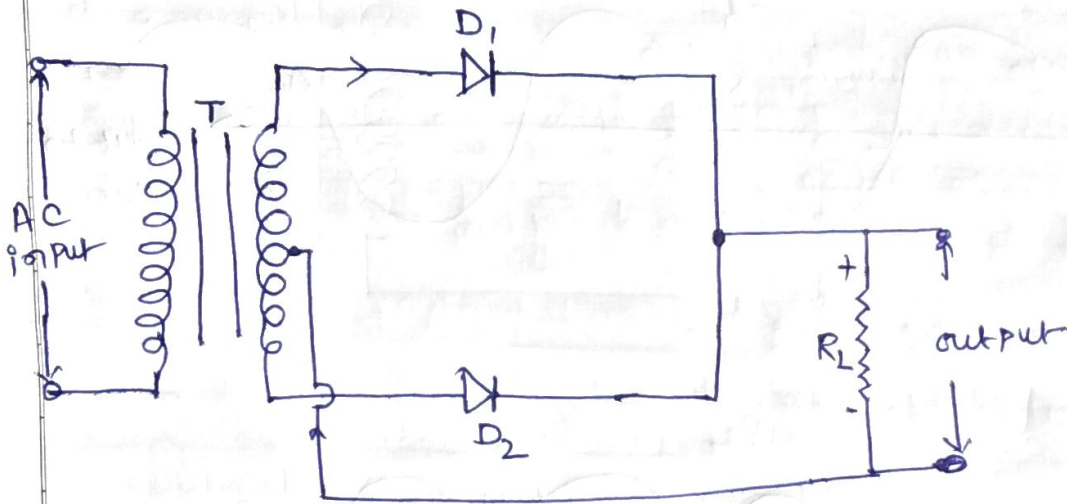


FULL-WAVE RECTIFIER:-

A full wave rectifier (two diodes) converts the applied alternating voltage to a pulsating voltage using full cycle of the applied voltage. That is the conduction takes place by the one rectifier element during one half and by the other element during the other half cycle. A circuit of a full-wave rectifier using two diodes D_1 and D_2 .



In the figure, the input is an A.C voltage applied across the diodes and the load resistor R_L . During the positive half period of the applied A.C voltage one diode conducts and the other not while during the other half cycle of the A.C voltage the second diode only conducts.

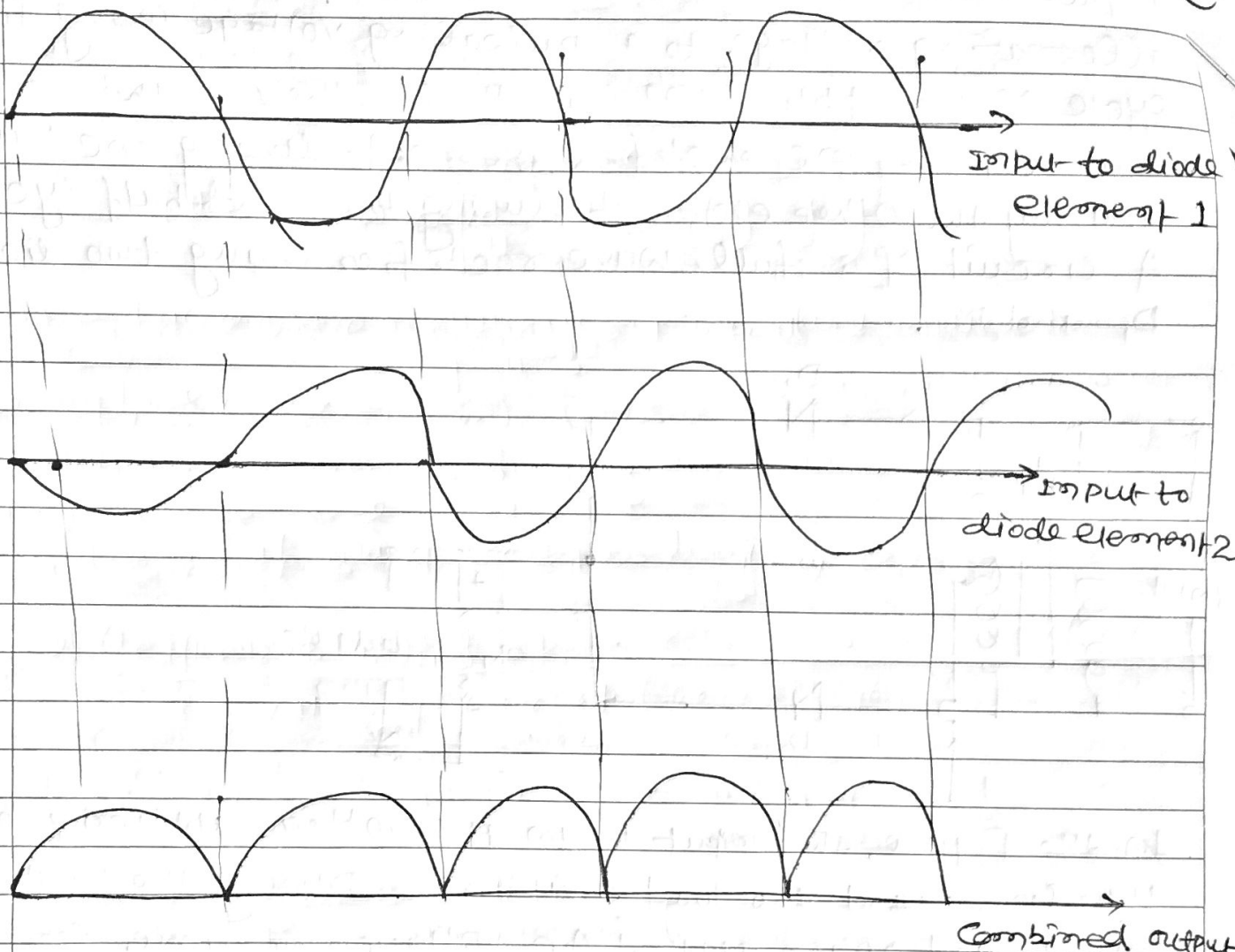
Let e_1 and e_2 be the nature of the output voltages for the first and the second diode.

Then the combined output voltage ($e_1 + e_2$) of both diode elements will be of the form,

It is to be noted that the output voltage obtained is pulsating nature.

02 Expression
+
D

Example _____

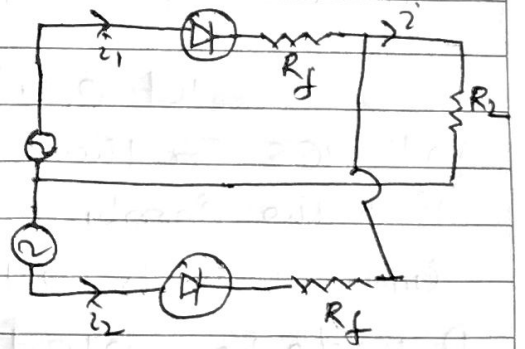


The total current flowing in the circuit will be the sum of the individual currents i_1 and i_2

$$i.e \quad i = i_1 + i_2$$

The value of maximum current is

$$I_{om} = \frac{V_{om}}{R_f + R_L}$$



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