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## Full wave rectifier

Q-1 (5)

- Junction diode as a full wave rectifier:-

The input a.c. signal is fed to the primary coil P of the transformer. The two ends A and B of the secondary S are connected to the p-ends of diodes  $D_1$  and  $D_2$ . The secondary is tapped at its central point T which is connected to the n-ends of the two diodes through the load resistance,  $R_L$ , as shown in given fig.

current through load  $R_L$  flows in the same direction ( $X \rightarrow Y$ ), so we get a pulsating d.c. voltage across  $R_L$ , as shown in fig. Since output voltage across the load resistance  $R_L$  is obtained for both half-cycles of input a.c., this process is called full wave rectification and the arrangement used is called full-wave rectifier.

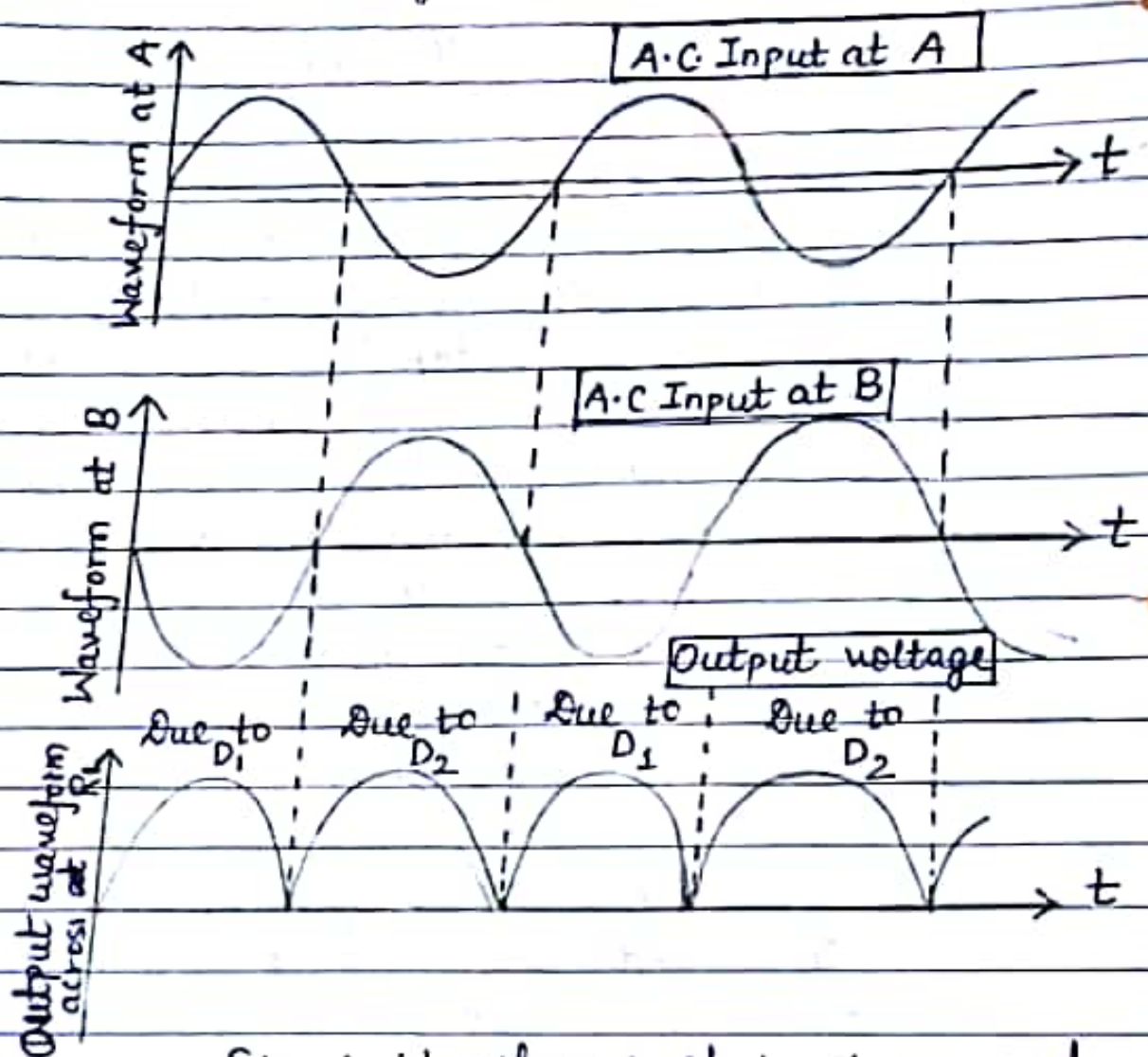


Fig. : Waveforms of input a.c and output voltage obtained from a full wave rectifier.