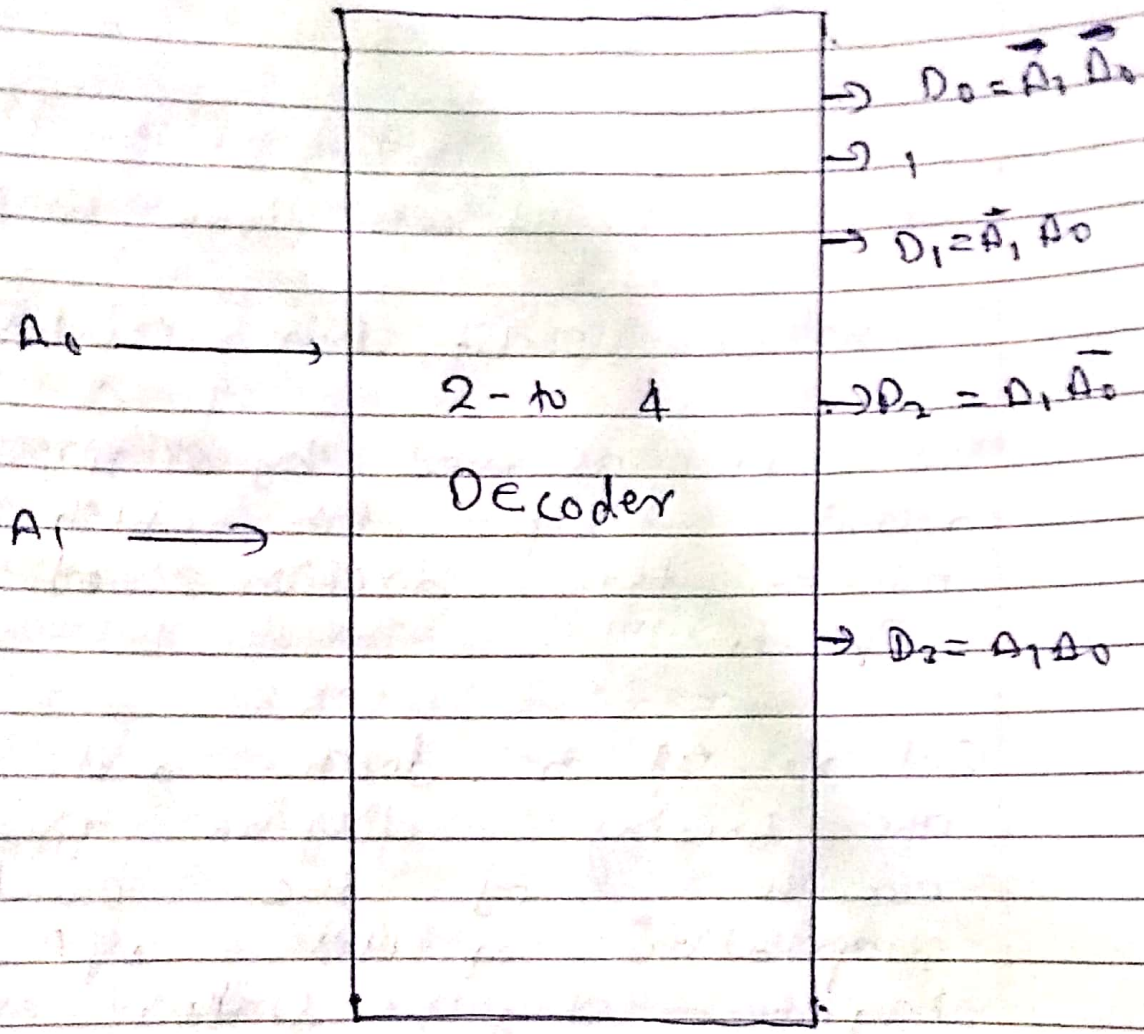


Section - 1

Ques.
Ques. - 3



Implementation 2-to-4 decoder with enable.

Decimal value	Enable	Input		Output			
	E	A_1	A_2	D_0	D_1	D_2	D_3
.	0	X	X	0	0	0	0
0	1	0	0	1	0	0	0
1	1	0	1	0	1	0	0
2	1	1	0	0	0	1	0
3	1	1	1	0	0	0	1

A 2-to-4 Binary Decoder.

The 2 binary inputs labelled A and B are decoded into one of 4 outputs hence the description of 2-to-4 Binary decoder.

Each output represented one of the minterms of the

2 input variables, (each output = a minterm)

Decoder is a combinatorial circuit that has n input lines and maximum of 2^n output lines. One of these output will be active high based

on the combination of input present when the decoder is enabled. That means decoder is a partially active decoder.