

GATE

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1. Consider the 2-bit multiplexer(MUX) shown in the figure. For OUTPUT to be the XOR of C and D, th values for A_0, A_1, A_2 and A_3 are ____ (GATE EC 2022)

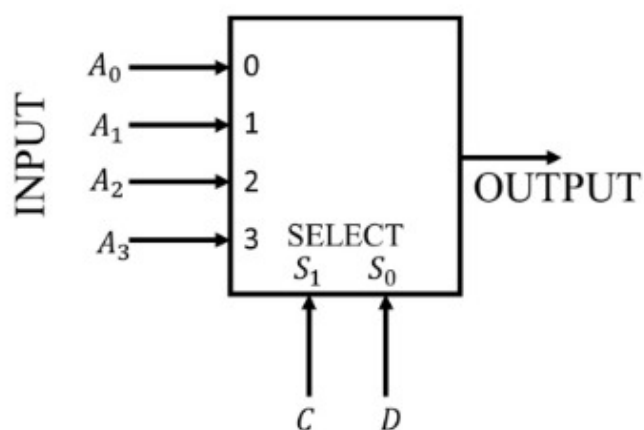


Figure 1: MUX

- (A) $A_0 = 0, A_1 = 0, A_2 = 1, A_3 = 1$
- (B) $A_0 = 1, A_1 = 0, A_2 = 1, A_3 = 0$
- (C) $A_0 = 0, A_1 = 1, A_2 = 1, A_3 = 0$
- (D) $A_0 = 1, A_1 = 1, A_2 = 0, A_3 = 0$