

Moderate

Assistant Engineer (Electrical), Class 2025

Building Department

4-

1110

A

1110

B

0111

C

1011

Correct

D

1001

Correct Answer: C

Full Detailed Explanation

Concept & Reasoning A bidirectional register can shift left or right depending on the control state. The safest exam method is to draw four boxes, mark the selected serial-input end, and update all four bits simultaneously for each clock. Because wording of 'input is LOW' and the waiting serial pattern determines the direction/entry convention, the state must be followed using the convention assumed by the question. Under that convention, two clocks lead to the official final state. How to Solve It in the Exam Draw four boxes and update them clock-by-clock. Important Exam Point For shift-register MCQs, never mentally rotate the nibble; explicitly mark MSB/LSB and input end. Related Revision Path This question sits in the revision path Digital Electronics Sequential Logic Shift Registers .

Open live question on website:

<https://sarkariresultout.com/pyq/hi/question/gpsc-ae-electrical-q160-bidirectional-shift-register-operation/>