

Medium Deputy Executive Engineer (Electricity) 2026 Gujarat Public Service Commission / Assistant Engineer (Electrical) 2026 Gujarat Public Service Commission

- A

1, 2, 3
- B

1, 4
- C

1, 2, 3

Correct
- D

Correct Answer: C

Full Detailed Explanation

∴ 1, 2, 3

V_{th} is the open circuit voltage across the terminals A and B. R_{th} is the equivalent resistance looking into the terminals A and B with all independent sources replaced by their internal resistances.

∴ $V_{th} = V_{OC}$; Z_{th} is the equivalent impedance looking into the terminals A and B with all independent sources replaced by their internal impedances.

∴ AC voltage source is in series with the load impedance Z_L .