

Hard

Deputy Executive Engineer (Electric) 2026

2026

ports Authority of Gujarat / Assistant Engineer (El

230 V, 50 Hz

A

1

2

B

2

3

C

1, 2

3

Correct

D

1

3

Correct Answer: C

Full Detailed Explanation

$$: -1, 2 \quad 3$$

; AC-

$$V_{dc} = (2 \times 230 / \sqrt{2}) \cos 30^\circ = 179.3 \text{ V. } R = 10$$

, Id 17.93 A.

$$: 1 : V_{dc} = (2V_m / \sqrt{3}) \cos \alpha = 0.9 V_{rms} \cos \alpha ; 3 : V_{dc} = 1.35 V_{LL}$$

COS .

COS

1 -

179.3 V

$$V_{dc} = (2 \times 230/\sqrt{2}) \cos 30^\circ = 179.3 \text{ V}$$

2.