

Easy

Deputy Executive Engineer (Electrician) 2026

Uttar Pradesh Power Corporation Limited / Assistant Engineer (Electrical)

DC 220 V

10 A

- A

1, 2 3
- B

2 3

Correct
- C

1 4
- D

Correct Answer: B

Full Detailed Explanation

Given : - 1, 2 3

$E_b = V - I_a R_a = 220 - 10 \times 1 = 210 \text{ V.}$

$P_{\text{converted}} = E_b I_a = 210 \times 10 = 2100 \text{ W.}$

$T = \frac{P_{\text{converted}}}{\omega} = \frac{2100}{2\pi \times 50} = 3.39 \text{ s.}$

1 - 210 V