

Easy

Assistant Engineer (Electrical), Class 2025

Building Department

What is the efficiency of a typical steam power plant?

A

10-20%

B

30-40%

Correct

C

50-60%

D

70-80%

Correct Answer: B

Full Detailed Explanation

Concept & Reasoning The Rankine cycle is constrained by thermodynamic temperature limits and practical component losses. Modern supercritical units can exceed older subcritical values, but the exam's typical range 30–40% is the appropriate conventional figure among the options.

How to Solve It in the Exam Conventional steam thermal plant – roughly one-third efficiency.

Important Exam Point Do not confuse boiler efficiency with overall station efficiency.

Related Revision Path This question sits in the revision path Power Plant Engineering → Steam Power Plants → Efficiency .

Open live question on website:

<https://sarkariresultout.com/pyq/question/gpsc-ae-electrical-q244-typical-thermal-efficiency/>