

Easy

Assistant Engineer (Electrical), Class 2025

Building Department

What is the purpose of a condenser in a steam power plant?

A

To convert steam back into water

Correct

B

To increase the temperature of the steam

C

To generate electricity

D

To control the speed of turbine

Correct Answer: A

Full Detailed Explanation

Concept & Reasoning: Condensing exhaust steam closes the Rankine water-steam cycle so condensate can be pumped back to the boiler. A good condenser also creates vacuum/low back pressure at the turbine exhaust and facilitates recovery of high-quality feedwater.

How to Solve It in the Exam: Condenser: steam back to water + low turbine back pressure.

Important Exam Point: Cooling water removes heat from steam; it does not mix with condensate in a surface condenser.

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

Open live question on website:

<https://sarkariresultout.com/pyq/question/gpsc-ae-electrical-q242-condenser-function/>