

UNIT-IV Steam Condensers

Fill in the Blanks

1. A steam condenser is used to convert exhaust steam into _____.
Answer: Water
2. The main purpose of a condenser is to maintain a _____ at the turbine exhaust.
Answer: Vacuum
3. The condensate collected in a condenser is called _____ water.
Answer: Feed
4. Condensers improve the overall _____ of a steam power plant.
Answer: Efficiency
5. In a surface condenser, steam and cooling water do not come into _____.
Answer: Contact
6. The cooling medium commonly used in condensers is _____.
Answer: Water
7. A condenser helps to reduce the _____ pressure of the turbine.
Answer: Back
8. In a jet condenser, cooling water mixes directly with _____.
Answer: Steam
9. The condensed steam is known as _____.
Answer: Condensate
10. Surface condensers are widely used in modern _____ plants.
Answer: Power

Multiple Choice Questions (10)

1. The primary function of a steam condenser is to:
 - A) Generate steam
 - B) Convert steam into water
 - C) Increase steam pressure
 - D) Produce electricity

Answer: B) Convert steam into water

2. A condenser is located:
 - A) Before the boiler
 - B) Before the turbine
 - C) After the turbine
 - D) After the generator

Answer: C) After the turbine

3. Which type of condenser keeps steam and cooling water separate?
 - A) Jet condenser
 - B) Surface condenser
 - C) Barometric condenser
 - D) Ejector condenser

Answer: B) Surface condenser

4. In a jet condenser:
 - A) Steam and cooling water do not mix
 - B) Steam and cooling water mix directly
 - C) Only air is cooled
 - D) Steam pressure increases

Answer: B) Steam and cooling water mix directly

5. The vacuum in a condenser helps to:

- A) Increase back pressure
- B) Reduce turbine efficiency
- C) Increase turbine output
- D) Stop steam flow

Answer: C) Increase turbine output

6. Which of the following is commonly used as a cooling medium?

- A) Oil
- B) Air
- C) Water
- D) Steam

Answer: C) Water

7. The water obtained after condensation is called:

- A) Brine
- B) Condensate
- C) Coolant
- D) Distillate

Answer: B) Condensate

8. Surface condensers are preferred because:

- A) Cooling water mixes with steam
- B) Pure condensate can be recovered
- C) They require no cooling water
- D) They increase steam pressure

Answer: B) Pure condensate can be recovered

9. Condensers improve the efficiency of a power plant by:

- A) Increasing boiler pressure
- B) Increasing turbine back pressure
- C) Reducing exhaust pressure
- D) Reducing steam generation

Answer: C) Reducing exhaust pressure

10. Which condenser is most widely used in thermal power plants?

- A) Jet condenser
- B) Surface condenser
- C) Low-level condenser
- D) Ejector condenser

Answer: B) Surface condenser