Assignment-7

Due on 2020-10-18, 23:59 IST.

Week 7

1. If the fuel is steamed then how much energy is consumed by the boiler? 2 points

- 4 MW
- 6 MW
- 8 MW
- 10 MW

2. The efficiency of a steam engine is 30%. What is the thermal efficiency of the steam turbine?
   - 30%
   - 40%
   - 50%
   - 60%

3. A boiler is a device that produces water steam. Which of the following is true?
   - A boiler is a device that produces water steam.
   - A boiler is a device that produces water.
   - A boiler is a device that produces steam.
   - A boiler is a device that produces both water and steam.

4. The efficiency of a steam engine is 30%. How much energy is consumed by the boiler if 250 MW of energy is consumed by the steam turbine?
   - 150 MW
   - 175 MW
   - 200 MW
   - 225 MW

5. A boiler is a device that produces water steam. Which of the following is true?
   - A boiler is a device that produces water steam.
   - A boiler is a device that produces water.
   - A boiler is a device that produces steam.
   - A boiler is a device that produces both water and steam.

6. Write the first law of thermodynamics for a boiler.

   \[ \Delta U = Q + W \]

   where \( \Delta U \) is the change in internal energy, \( Q \) is the heat added to the system, and \( W \) is the work done by the system.

7. A boiler is a device that produces water steam. Which of the following is true?
   - A boiler is a device that produces water steam.
   - A boiler is a device that produces water.
   - A boiler is a device that produces steam.
   - A boiler is a device that produces both water and steam.

8. The efficiency of a steam engine is 30%. How much energy is consumed by the boiler if 250 MW of energy is consumed by the steam turbine?
   - 150 MW
   - 175 MW
   - 200 MW
   - 225 MW

9. A boiler is a device that produces water steam. Which of the following is true?
   - A boiler is a device that produces water steam.
   - A boiler is a device that produces water.
   - A boiler is a device that produces steam.
   - A boiler is a device that produces both water and steam.

10. The efficiency of a steam engine is 30%. How much energy is consumed by the boiler if 250 MW of energy is consumed by the steam turbine?
    - 150 MW
    - 175 MW
    - 200 MW
    - 225 MW

11. A boiler is a device that produces water steam. Which of the following is true?
    - A boiler is a device that produces water steam.
    - A boiler is a device that produces water.
    - A boiler is a device that produces steam.
    - A boiler is a device that produces both water and steam.

12. The efficiency of a steam engine is 30%. How much energy is consumed by the boiler if 250 MW of energy is consumed by the steam turbine?
    - 150 MW
    - 175 MW
    - 200 MW
    - 225 MW

13. A boiler is a device that produces water steam. Which of the following is true?
    - A boiler is a device that produces water steam.
    - A boiler is a device that produces water.
    - A boiler is a device that produces steam.
    - A boiler is a device that produces both water and steam.

14. The efficiency of a steam engine is 30%. How much energy is consumed by the boiler if 250 MW of energy is consumed by the steam turbine?
    - 150 MW
    - 175 MW
    - 200 MW
    - 225 MW

15. A boiler is a device that produces water steam. Which of the following is true?
    - A boiler is a device that produces water steam.
    - A boiler is a device that produces water.
    - A boiler is a device that produces steam.
    - A boiler is a device that produces both water and steam.