

**CHAPTER-3****Power Plant****1. Steam power Cycle**

1. Thermal plant works on :
  - (a) Carnot cycle
  - (b) Joule cycle
  - (c) Rankine cycle
  - (d) All the above [2009]
  
2. The term bleeding in a steam turbine refer to –
  - (a) Removal of wet steam in the low pressure stages of turbine
  - (b) Leakage of steam
  - (c) Steam extracted for preheating feed water
  - (d) Steam doing no useful work [2014]
  
3. For the same maximum temperature in the cycle m the average temperature of heat addition of a rankine cycle compared to that of Carnot cycle is-
  - (a) Same
  - (b) Not related
  - (c) Higher
  - (d) Lower [2015]
  
4. The difference between the temperature of the superheated steam and the liquid vapour saturation temperature at the corresponding pressure is known as –
  - (a) The extent of superheat
  - (b) The limit of superheat
  - (c) The approach of superheat
  - (d) The degree of superheat [2015]
  
5. If re-heater is added to a rankine cycle, then usually:
  - (a) The net work and efficiency decreases
  - (b) The net work increases and efficiency remains same
  - (c) The net work and efficiency increases
  - (d) The net work remains same and efficiency increases [2015]
  
6. Which combination of the following statements is correct?  
The incorporation of re-heater in a steam power plant
  - A . always increases the thermal efficiency of the plant
  - B. always increases the dryness fraction of steam at condenser inlet
  - C. always increases the main temperature of heat addition
  - D. always increases the specific work output
  - (a) A and D only
  - (b) B and D only
  - (c) A,C and D only
  - (d) A,B,C and D [2017]
  
7. The overall efficiency of thermal power plant is \_\_\_\_\_.
  - (a) Boiler efficiency, turbine efficiency and generator efficiency
  - (b) Boiler efficiency, turbine efficiency , generator efficiency and gas cycle efficiency
  - (c) Carnot cycle efficiency
  - (d) Regenerative cycle efficiency [2017]
  
8. The concept of regeneration is used in which cycles?
  - (a) Rankine and stirling
  - (b) Striling and ericsson
  - (c) Rankine and ericsson
  - (d) Striling and brayton [2017]
  
9. Which of the following is a water tube boiler?
  - (a) Lancashire boiler
  - (b) Scotch marine boiler
  - (c) Cornish boiler
  - (d) Babcock and Wilcox boiler [2017]