

**Class Material****Transmission****Date: 28.07.2019****Generation of Electrical Power**

1. Which of following power plant has highest depreciation charges?

- i) Nuclear plant      ii) Thermal plant  
iii) Diesel plant      iv) Hydroelectric plant

**Ans. (i)**

2. Diesel power plant are generally used at

- i) Peak load plant      ii) Base load plant  
iii) Standby plant      iv) None of these

**Ans. (iii)**

3. Which of the following power plant has highest efficiency?

- i) Steam power plant  
ii) Hydro power plant  
iii) Nuclear plant  
iv) Diesel power plant

**Ans. (ii)**

4. The major heat loss in a steam power stations occurs in

- i) Condenser      ii) Compressor  
iii) Turbine      iv) Super heater

**Ans. (iii)**

5. In nuclear power plant, which of the following is used to moderate the speed of neutron?

- i) Moderator      ii) Controller  
iii) Valve      iv) Filter

**Ans. (i)**

6. Out of the following, which one is not an unconventional source of energy?

- i) Tidal power      ii) Geothermal energy  
iii) Nuclear energy      iv) Wind power

**Ans. (iii)**

7. Pulverised coal is

- i) Coal free from ash  
ii) Non- smoking coal  
iii) Coal which burns for long time  
iv) Coal broken into fine particles.

**Ans. (iv)**

8. Power plants using coal work closely, on which of the following cycle.

- i) Otto cycle      ii) Binary vapour cycle  
iii) Brayton cycle      iv) Ranking cycle

**Ans. (iv)**

9. The efficiency of a thermal power plant improves with

- i) Increased quantity of coal burnt  
ii) Larger quantity of water used  
iii) Lower load in the plant  
iv) Use of high steam pressure

**Ans. (iv)**

10. Economisers are used to heat .....

- i) Air      ii) Feed water  
iii) Steam      iv) Diesel

**Ans. (ii)**

11. Which of the following, enters the super-heater of a boiler

- i) Cold water      ii) Hot water  
iii) Wet steam      iv) Super-heated steam

**Ans. (iii)**

12. Super-heated steam is always

- i) At a temperature higher than the saturation temperature corresponding to a steam pressure  
ii) At a pressure more than the boiler steam pressure  
iii) Separated from water particles before being supplied to turbine  
iv) At a pressure less than the maximum cycle pressure

**Ans. (i)**

13. Equipment used for pulverizing the coal is known as

- i) Ball mill      ii) Hopper  
iii) Burner      iv) Stoker

**Ans. (i)**

14. A condenser in a thermal power plant condenses steam coming out of
- i) Boiler
  - ii) Super heater
  - iii) Economizer
  - iv) Turbine

**Ans. (iv)**

15. Most of the generators in thermal power plants runs at
- i) 3000 rpm
  - ii) 1500 rpm
  - iii) 1000 rpm
  - iv) 750 rpm

**Ans. (i)**

16. Overall thermal efficiency of a steam power station is in the range of
- i) 24-30%
  - ii) 30-40%
  - iii) 40-50%
  - iv) 70-80%

**Ans. (i)**

17. In hydro-electric plant, a conduct system for taking water from the intake works to the turbine, is known as
- i) Dam
  - ii) Reservoir
  - iii) Penstock
  - iv) Surge tank

**Ans. (iii)**

18. A surge tank in hydro-electric power plant is located near the ..... of the conduit.
- i) Beginning
  - ii) Middle
  - iii) End
  - iv) None of these

**Ans. (i)**

19. A Pelton wheel is
- i) Inward flow impulse turbine
  - ii) Outward flow impulse turbine
  - iii) Inward flow reaction turbine
  - iv) Axial flow impulse turbine

**Ans. (iv)**

20. A Francis turbine is
- i) Inward flow reaction turbine
  - ii) Inward flow impulse turbine
  - iii) Outward flow reaction turbine
  - iv) Outward flow impulse turbine

**Ans. (i)**

21. A Kaplan turbine is
- i) A high head mixed flow turbine
  - ii) An impulse turbine, inward flow type
  - iii) An reaction turbine outward flow type
  - iv) Low head axial flow turbine

**Ans. (iv)**

22. The cost of fuel transportation is minimum in ..... Plant
- i) Steam
  - ii) Hydro electric
  - iii) Nuclear
  - iv) diesel

**Ans. (ii)**

23. India's first nuclear power plant was built at.....
- i) Tarapur
  - ii) Rana
  - iii) Partapsagar
  - iv) Kalpakkam

**Ans. (i)**

24. The complete fission of 1 kg of Uranium (U235) can produce as much energy as can be produced by the burning of
- i) 1000 tons of high grade coal
  - ii) 4500 tons of high grade coal
  - iii) 8000 tons of high grade coal
  - iv) 10000 tons of high grade coal

**Ans. (ii)**

25. The cheapest plant in operation and maintenance is ..... plant
- i) Steam
  - ii) Hydro-electric
  - iii) Diesel
  - iv) Nuclear

**Ans. (iii)**

26. Which of the following is/are base load plants?

- i) Thermal plants
- ii) Hydro plants
- iii) Nuclear plants
- iv) All of the above

**Ans. (iv)**

27. Electrostatic precipitators in thermal power plants are used for

- i) Removal of ash from flue gas
- ii) Remove moisture from the coal
- iii) Control flow rate
- iv) All of the above

**Ans. (i)**

28. Which of the following statements is/are true?

- i) A pumped storage plant is a base load plant
- ii) The starting time of pumped storage plant is very short
- iii) Pollution free
- iv) Both ii) & iii)

**Ans. (iv)**

29. In a power station 'Load Center' means.....

- i) Center of maximum load of equipments
- ii) Center of coal fields
- iii) Center of gravity of electrical system
- iv) Corner of power plants

**Ans. (iii)**

30. Major share of power produced in India is through

- i) Thermal plants
- ii) Hydro plants
- iii) Nuclear plants
- iv) Diesel plants

**Ans. (i)**

31. A derating factor of 0.88 is applied to cables travelling through thermal insulation, how thick is this thermal insulation?

- i) 200 mm
- ii) 100 mm
- iii) 500 mm
- iv) 50 mm

**Ans. (iv)**

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