

Q1. Arrange the source of electricity in India in ascending order

1. Thermal
2. Nuclear
3. Renewable
4. Hydroelectric Power

Choose the correct answer below:

- A) 1, 3, 4 & 2
- B) 1, 4, 3 & 2
- C) 1, 3, 4 & 2
- D) 2, 3, 4 & 1

Q2. Which of the following is correct about 'Grid Connected Rooftop and Small Solar Power Plants Programme'?

1. It encourages power generation for self-consumption as well as supply/sale of electricity to the grid.
  2. The plants can be up to a maximum capacity of 500 kWp and should have a minimum capacity of 1.0 kW
  3. A battery back-up is mandatory for the individual projects
- A) 1 only B) 2 only C) 1&2 D) 1,2&3

Q3. What is net-metering?

- A. It is metering system used to measure free current given to farmers
- B. It is a new type of metering system used for industrial use
- C. It is a metering system used when solar installation integrated into grid
- D. All

Q4. In the backdrop World Renewable Energy Technology Congress, 3D stands for

1. De-carbonization of the energy space;
  2. Democratization of energy space
  3. Decentralization of energy space
- A) 1, 2 B) 1, 3 C) 2, 3 D) 1, 2 & 3

Q5. Find Out the odd one out for nuclear energy

1. Vitrification
2. Graphite rods
3. Kamini

A) 1 B) 2 C) 3 D) none

Q6: correct statement about superconductors

- A. Maximum energy loss in superconductor
- B. These are used in Large Hadron Collider
- C. They create magnetic flux inside the material
- D. All

Q7. What are the hurdles to achieve National Electric Mobility Mission Plan (NEMMP)

- A. Lack of battery producing minerals like lithium
- B. Lack of policy and investment push for electrical vehicles
- C. Electrical vehicles are more expensive than fossil fuel based vehicles
- D. All

Q8. What are the effects of Black Carbon

1. It causes lung related disorders
  2. It causes global warming
  3. It delays ice sheets melting by covering it above atmosphere
- A. 1,2 B) 1,3 C) 2,3 D) 1,2&3

Q9: What is the main cause for black carbon formation?

- A. Incomplete combustion of fossil fuels
- B. Incomplete combustion of Biomass
- C. Incomplete combustion of Biodiesel
- D. All

Q10. Choose the correct statement about energy efficient appliances

1. Energy Efficiency Services Limited (EESL) is the implementation agency for the Buildings Energy Efficiency Programme.
  2. Nation LED programme launched in compliance with above initiation
- A) Only 1 B) only 2 C) both 1&2 D) none

Q11: Choose the correct statements

- A. LED are more energy efficient compared to CFLs(compact fluorescent lights)
- B. CFLs are more suitable in household purpose than LEDs
- C. LED lights are more suitable in traffic signal lights than in house hold applications
- D. All

Q12.

Assertion A: Coal bed methane had potentially to meet India's growing energy needs

Reason R: India is having many coal fields, which is primary source of coal bed methane

- A. Both A&R are correct and R is correct explanation
- B. Both are correct bit R is not correct explanation
- C. A is correct R is wrong
- D. A is wrong, R is right

Q13. Which of the below are correct

1. Indian Institute of petroleum situated in Dehradun, Uttarakhand
2. ONGC is one of the seven Maharatnas

- A. Only 1 B) only 2 C) both 1&2 D) none

Q14. Which of the following statements is/are provisions found in The Energy Conservation Building Code (ECBC) 2017 ?.

- A. Developed by Ministry of Power and Bureau of Energy Efficiency (BEE)
- B. This bill encourages concept of green buildings
- C. This is designed only for new buildings
- D. Only A & B

Q15. Which of the below correct about solar energy

1) In solar cell, light energy directly converted into electricity by the photovoltaic effect.

2) India is second largest Installed pv solar in the world.

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 and 2

Q16. The first airport in the world, to be completely powered by solar energy is

- A. Tirupathi
- B. Vijaywada
- C. Delhi
- D. Cochin

Q17. Which of the below comes under renewable energy sources

- 1. Biodiesel
  - 2. Shale gas
  - 3. Geothermal energy
- A) 1&2. B) 2&3. C) 1&3. D) 1,2&3

Q18. Which of the below are correct about LPG

- 1. It consists mainly of Propane and Butane
  - 2. It is obtained from natural gas and condensate wells, oil wells
- A. Only 1 B) only 2 c) both 1&2 d) none

Q19.

Assertion A: LPG is a cleaner gas when compared to gasoline.

Reason R: On combustion it doesn't releases CO<sub>2</sub>

- A. Both A&R are correct and R is correct explanation
- B. Both are correct bit R is not correct explanation
- C. A is correct R is wrong
- D. A is wrong, R is right

Q20. What is the best substitute to bring down overall cost of LPG

- A. Replacing steel cylinders with composite cylinders
- B. Encouraging piped supply of gas in towns
- C. By replacing LPG cylinders with spherical shaped containers
- D. All

Q21. Which of the below are correct about methanol

- 1. It is used in the preparation of the intoxicants
  - 2. It is majorly used only as fuel
- A. Only 1 B) only 2 C) both 1&3 D) None

Q22. Methanol is produced from which of the below

- A. fossil fuels like natural gas, coal
- B. Renewable sources like biomass and municipal water
- C. Both A&B
- D. None

Q23.

Assertion: Methanol use will decrease petroleum imports in our country

Reason: methanol can be produced from coal and India is having huge resources of coal deposits

- A. Both A&R are correct and R is correct explanation
- B. Both are correct bit R is not correct explanation
- C. A is correct R is wrong
- D. A is wrong, R is right