



DAILY QUIZ OCTOBER-2017
ENERGY-KEY

Q1 Answer: D

Explanation:

Recently the Central government entity Energy Efficiency Services Limited (EESL) has awarded a contract to Tata Motors to procure 10,000 electric vehicles for government departments.

Q2 Answer: C

Explanation:

The car may be electric, but the power plants producing the electricity are largely coal-fired, raising questions about the car's real environmental cost. "Electric vehicles are only as green as the energy sources used to charge them. Charging electric vehicles in India remains a challenge as 60 per cent of electricity is generated from coal-fired power plants.

Q3 Answer: A

Explanation:

Government of India launched the National Electric Mobility Mission Plan (NEMMP) 2020 in 2013. It aims to achieve national fuel security by promoting hybrid and electric vehicles in the country. There is an ambitious target to achieve 6-7 million sales of hybrid and electric vehicles year on year from 2020 onwards. Government aims to provide fiscal and monetary incentives

Q4 Answer: B

Explanation:

The four types of coal include peat, lignite, bituminous, and anthracite, with anthracite being most desirable due to its high heat content.

Q5 Answer: B

Explanation:

- First floating solar project was executed in West Bengal in 2014 at Rajarhat
- Two floating solar projects with the capacity of 10 MW each are coming up in Andhra Pradesh and Kerala to harness unutilised water bodies.

Q6 Answer: C

Explanation: Both are correct

Q7 Answer: B

Explanation:

- International Campaign to Abolish Nuclear Weapons (ICAN), a coalition of non-governmental organisations from over 100 countries around the globe.
- ICAN has been the leading civil society actor in the effort to achieve a prohibition of nuclear weapons under international law.

Q8 Answer: D

Explanation:

Natural gas is produced from natural gas and oil wells on land and offshore and from coal beds. USA is meeting its energy requirement through advancement in Shale Natural gas extraction technology.

Q9 Answer: D

Explanation:

Even though india's Renewable energy sector is growing , India will be an influential buyer in the global energy market. Given India's dependence on imports (80% oil and 50% gas) India has to constantly track the global trends and learn from experts.

Q10 Answer: A

Explanation:

The alliance includes around 121 countries (not all UN members) that support the "Declaration on the occasion to launch the international solar alliance of countries dedicated to the promotion of solar energy"

Q11. Answer: D

Explanation:

Gas based power plants required just 20 months for completion as compared to at least 48 months in case of thermal plants, which also makes these projects cost effective

Q12 Answer: B

Explanation:

A sunrise industry is typically characterized by high growth rates, numerous start-ups and an abundance of venture capital funding.

Q13 Answer: A

If fluid temperature does not depend on air pressure or volume, it will be impossible to cool an air parcel by the fluid. The heat exchange mechanism will simply not work.

Q14 Answer: C

Explanation:

- The Indira Gandhi International Airport here has become Asia-Pacific's only and one of the world's few airports to achieve a "carbon neutral" status
- The airport, managed by private operator Delhi International Airport Ltd (DIAL), boasts green buildings, solar power plants, rainwater harvesting system, etc., which have helped reduce and offset carbon emissions.

Q15 Answer: C

Explanation:

Super Earth' – a planet with a mass higher than the Earth's, but substantially lower than the masses of ice giants Uranus and Neptune.

Q16 Answer: D

Explanation:

- First LIGO lab outside US is coming up in Maharashtra Hingoli.
- In USA LIGO present in Washington and Livingston.
- European gravitational wave observatory- VIRGO present in Italy.

Q17 Answer: D

Explanation:

The differential heating effect caused by water underneath the solar panels increases their efficiency. It also save land which is a hot commodity in India and

thus avoid land acquisition problem. But main disadvantage is replacing or repairing the panels

Q18 Answer: D

Explanation:

- Narrowing of technology choices (c-Si now constitutes over 90 per cent of production) and sourcing (over two-thirds of global supply is from China or Taiwan) has made better deals possible.
- India's 100 GW plan is, by far, the most ambitious solar procurement programme globally, and the experience of the last five years has given it a well-drilled tender process; solar parks take out some of the development risk.
- This has reduced the cost of participation for bidders, and several long-term players with interest to build a portfolio have emerged.

Q19 Answer: D

Explanation:

- Denmark's Vestas will help to build the world's first utility-scale project that uses battery technology to store power from both wind and solar sources.
- It being developed in Australia.
- It aims to bring down the cost of renewable energy production and help secure a steady supply of renewable power to the grid regardless of whether condition

Q20 Answer: D

Explanation:

- Thunderstorms producing lightning, heavy rainfall, and sometimes awe-inspiring cloud formations.
- As the warm, moist air moves upward, it cools, condenses, and forms a cumulonimbus cloud that can reach heights of over 20 kilometres.

Q21 Answer: A

Explanation:

- PMUG will pass through five states like Uttar Pradesh, Bihar, Jharkhand, Odisha and West Bengal.
- This pipeline will lead to industrial development of eastern India.

Q22 Answer :B

Explanation:

- A mini grid is defined as a system that uses a renewable energy-based generator having a capacity of 10 kilowatt or more to supply electricity through a public distribution network.
- Currently there are 106 mini grids in three states operating through seven private sector companies.
- Mini grids set up has not been part of Deen Dayal Rural Electrification Scheme.

Q23 Answer: C

Explanation:

- During an emergency at any of the DAE(Department of Atomic Energy) facility, the Crisis Management Group (CMG) of DAE activates the emergency response and coordinates with other agencies.
- The CMG is immediately activated and will co-ordinate between the local authority in the affected area and the National Crisis Management Committee (NCMC).
- The CMG comprises of senior officials drawn from various units of DAE like the Nuclear Power Corporation of India Ltd (NPCIL), Bhabha Atomic Research Centre (BARC), Heavy Water Board (HWB) and the Directorate of Purchase and Stores (DP&S). It also includes a senior official from the Atomic Energy Regulatory Board (AERB).
- Monitoring and response support coverage is being enhanced through 18 numbers of Emergency Response Centers (ERCs) established by BARC (Bhabha Atomic Research Centre).

Q24 Answer: C

Explanation:

- Italy has set its sights on phasing out coal power plants by 2025.

- Italy's biggest utility Enel has said it will not invest in new coal-fired power plants.
- The new energy strategy, still under discussion, aims to reach the goal of 27 percent of gross overall energy consumption from renewable sources by 2030.

Q25 Answer: B

Explanation:

- Open access charges in electricity distribution primarily comprise Cross Subsidy Surcharge (CSS), additional surcharge, wheeling & transmission charges and transmission & distribution losses in kind.
- There is increasing trend in open access charges
- This is adversely affecting the procurement of power through open access by High Tension consumers

Q26 Answer: D

Explanation:

- The world's first hybrid electric tram powered by hydrogen fuel cells has started running in China, marking a big step in the application of green energy in public transport.
- Water being its only emission, the tram emits no pollutants