



EXCEL CIVILS ACADEMY

DAILY CURRENT AFFAIRS

Date: 18-05-2021

EXPLANATION

1. Ans) (b)

Explanation:

The Central Government in consultation with the RBI, has decided to issue Sovereign Gold Bonds. The Sovereign Gold Bonds will be issued in six tranches from 17th May to September 2021. The Bonds will be sold through Scheduled Commercial banks (except Small Finance Banks and Payment Banks), Stock Holding Corporation of India Limited (SHCIL), designated post offices, and National Stock Exchange of India Limited and Bombay Stock Exchange Limited. The minimum permissible investment will be one gram of gold. Investors will be compensated at a fixed rate of 2.50% per annum payable semi-annually on the nominal value. The Bonds will be restricted for sale to resident individuals, Hindu Undivided Families, Trusts, Universities and Charitable Institutions. The tenor of the Bond will be for a period of 8 years with exit option after 5th year to be exercised on the next interest payment dates.

2. Ans) (d)

Explanation:

Covid-19 infections are being reported among the Particularly Vulnerable Tribal Groups (PVTGs) of Odisha. As many as 21 tribals across eight different PVTGs in the State have so far tested positive, including two from the Bonda tribe. Bonda people live in the highlands of Malkangiri. Members of Dongria Kondh, another PVTG, have tested positive in Rayagada district.

Do you know?

Odisha has among the largest and most diverse tribal populations in the country. Of the 62 tribal groups residing in Odisha, 13 are recognised as PVTGs. According to the 2011 Census, Odisha's share of the country's total tribal population was 9%. Tribals constitute 22.85% of the State's population. PVTGs in the states: Bonda, Birhor, Chuktia Bhunjia, Didayi, Dongria Kandha, Hill Kharia, Juang, Kutia Kondh, Lanjia Saora, Lodha, Mankirdia, Paudi Bhuyan and Saora. These PVTGs have been identified on the basis of stagnant or diminishing populations, subsistence level of economy associated with pre-agricultural stages of hunting, food gathering and shifting cultivation, and relative physical isolation.

3. Ans) (c)

Explanation:

A American turtle popular as a pet is threatening to invade the natural water bodies across Northeast India. Northeast India is home to 21 of the 29 vulnerable native Indian species of freshwater turtles and

tortoises. Between August 2018 and June 2019, a team of herpetologists from the NGO 'Help Earth' found red-eared sliders in the Deepor Beel Wildlife Sanctuary and the Ugratara temple pond — both in Guwahati, Assam. The red-eared slider (*Trachemys scripta elegans*) derives its name from red stripes around the part where its ears would be and from its ability to slide quickly off any surface into the water. It is native to the U.S. and northern Mexico. This turtle is an extremely popular pet. They grow fast and virtually leave nothing for the native species to eat.

It has already affected States such as Karnataka and Gujarat, where it has been found in 33 natural water bodies. Preventing this invasive species from overtaking the Brahmaputra and other river ecosystems in the Northeast is crucial because the Northeast is home to more than 72% of the turtle and tortoise species in the country, all of them very rare.

4. Ans) (d)

Explanation:

Punjab Chief Minister Amarinder Singh has declared Malerkotla as the 23rd district of the state on the occasion of Eid-ul-Fitr. Getting Malerkotla declared as an independent district was a long pending demand of the Muslim community and the residents of the town. The town has a predominant Muslim population.

5. Ans) (d)

Explanation:

As the demand for online swearing-in of the new government in Kerala gets louder, jurists say there is no legal infirmity in a government assuming office through online mode.

What does the Constitution of India say? The Article 164 (3) of the Constitution states that "before a Minister enters upon his office, the Governor shall administer to him the oaths of office and of secrecy according to the forms set out for the purpose in the Third Schedule." There is no ban on an online event as the Constitution does not insist on a physical mode.

Need for:

Several organisations, including the Indian Medical Association, have favoured the online mode in the wake of the alarming spread of COVID-19. Besides, the makers of the Constitution had not foreseen the advent of online world and hence there was no mention about the mode of Ministers assuming the office.

6. Ans) (a)

Explanation:

A plea was filed in the Supreme Court seeking a direction to utilise the PM-CARES fund for immediate procurement of vaccines and establishment of oxygen plants, generators and their installation in 738 district hospitals across the country. The petition said the government should loosen its PM-CARES purse strings and help common people in accessing medical care and oxygen.

Need for:

These government hospitals are easily accessible at no cost to common people of every district in the country who are desperately seeking medical oxygen as basic life-saving support.

About PM-CARES:

The Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM-CARES) Fund was set up to accept donations and provide relief during the Covid-19 pandemic, and other similar emergencies.

PM-CARES Fund:

PM-CARES was set up as a public charitable trust with the trust deed registered on March 27, 2020.

It can avail donations from the foreign contribution and donations to fund can also avail 100% tax exemption. PM-CARES is different from the Prime Minister's National Relief Fund (PMNRF).

Who administers the fund? Prime Minister is the ex-officio Chairman of the PM CARES Fund and Minister of Defence, Minister of Home Affairs and Minister of Finance, Government of India are ex-officio Trustees of the Fund.

7. Ans) (c)

Explanation:

China's uncrewed 'Tianwen-1' spacecraft recently landed safely on the surface of Mars. The spacecraft landed on a large plain located in the northern hemisphere of Mars, known as Utopia Planitia. This makes China the second country in the world to send a rover to explore the mysterious Red Planet. Onboard the lander was the 'Zhurong' rover, which will soon be deployed to study the Martian atmosphere and geology.

The Tianwen-1, China's Mars mission:

Launched in July 2020, the mission consists of an orbiter, a lander and a golf cart-sized rover called 'Zhurong'. The spacecraft arrived in Mars' orbit in February this year.

Yinghuo-1 mission:

This is not the first time China has attempted to send a spacecraft to Mars. Nearly ten years ago, the country launched the Yinghuo-1 mission, which ultimately failed after the spacecraft burnt while still in the Earth's atmosphere after the Russian rocket that was carrying it failed in flight.

What Next?

If 'Zhurong' is deployed without a hitch, China will become the first country to successfully orbit, land and offload a rover during its maiden Mars mission. Which other countries have managed to send rovers to Mars? Apart from China, only the United States has been able to deploy rovers to study the surface of the Red Planet. The first successful landing was made by NASA in July 1976, when the Viking 1 rover touched down on Mars. Shortly after that, Viking 2 arrived on the Red Planet. In the decades that followed, the US successfully sent the Opportunity and Spirit rovers to explore Mars. Most recently, in February this year, NASA's Perseverance rover landed at the Jezero Crater on the Red Planet, after which it resumed work to look for signs of past life.

8. Ans) (b)

Explanation:

National carrier Air India has begun the first of its “zeolite cargo flights” with the government of India having commenced the process of importing zeolite from across the world for use in medical oxygen plants. The government has appointed the Defence Research and Development Organisation (DRDO) as the charterer for these consignments. Under the Prime Minister’s Citizen Assistance and Relief in Emergency Situations (PM CARES) Fund, the DRDO is to set up these medical oxygen plants. Use of Zeolite in medical oxygen plants: The technology being developed by the DRDO uses the pressure swing adsorption process and molecular sieve zeolite in oxygen generation. Zeolites are used as adsorbent material. An oxygen concentrator uses Zeolites to adsorb atmospheric nitrogen and then vents out the nitrogen. This leaves oxygen gas remaining to be used for patients. In high pressure, the surface area of zeolites increases and thus is capable of adsorbing large quantities of nitrogen. Pressure Swing Adsorption: Pressure swing adsorption (PSA) is a technology used to separate some gas species from a mixture of gases under pressure. PSA operates at near-ambient temperatures. Specific adsorbent materials (e.g., zeolites, activated carbon, molecular sieves, etc.) are used as a trap, preferentially adsorbing the target gas species at high pressure.

What are Zeolites?

Zeolites are microporous, three dimensional crystalline solid of aluminium silicate. Zeolites have small openings of fixed size in them which allow small molecules to pass through them easily but larger molecules cannot pass through them; that is why they are sometimes called molecular sieve.

Zeolites are either formed naturally or can be synthesized.

Properties Of Zeolites:

Zeolites are very stable solid under different environmental conditions. The melting point of zeolite is very high, i.e.1000oC. They are insoluble in water or other inorganic solvents. They do not undergo oxidation in the presence of air. Zeolites which are rich in alumina are attracted to polar molecules like water whereas zeolite rich in silica are attracted towards nonpolar molecules. Since zeolites are not reactive and are obtained from naturally occurring minerals, therefore, they do not have any harmful environmental effects; although skin contact or inhalation may have a carcinogenic effect.

9. Ans) (b)

Explanation:

It is a meteorite. A piece of the Winchcombe meteorite had touched down in the town of Winchcombe in Gloucestershire in the UK in February 2021. It will be displayed at the National History Museum beginning next week. The difference between a meteor, meteorite and meteoroid is nothing but where the object is:

Meteoroids are objects in space that range in size from dust grains to small asteroids. But when meteoroids enter the Earth's atmosphere they are called meteors. But if a meteoroid enters the Earth's atmosphere and hits the ground, it is called a meteorite.

10. Ans) (a)

Explanation:

It is a new species of an Asian gracile skink that has been discovered recently at Anaikatti hills, Coimbatore. This species is only the third skink species discovered from mainland India in the last millennium. The reptile has a slender body of just about 7 cm and is sandy brown in colour. The inconspicuous limbs of skinks make them resemble snakes. Most skinks are diurnal and are non-venomous. Skinks are known to feed on insects such as termites, crickets and small spiders. It is currently classified as a vulnerable species.