

www.vishnuias.com



JULY

04.07.2021

CURRENT AFFAIRS

A MAGAZINE FOR CIVIL SERVICES PREPARATION

JOIN OUR TELEGRAM: <https://t.me/vishnuiasmentor>

**Articles of the day
THE HINDU & INDIAN EXPRESS**

UPSC

General Studies

Test Series

**Online &
Offline
classes**

**One-Stop
Solution**

**Free daily
materials**

GS 2 : Polity, Governance, International Relations

1. What lies ahead for Afghanistan after U.S. exit?

Context:

- As part of the U.S.'s plan to withdraw its troops from Afghanistan by September 11, **the U.S. troops departed from the Bagram Air Base** that had helped coordinate its long drawn war in Afghanistan. This effectively **marks the end of their military operations in the country.**

Background:

The U.S.-Taliban deal:

- In a bid to end its war in Afghanistan, the **US reached a deal with the Taliban in February 2020.**
- The deal dealt with four aspects of the conflict – violence, foreign troops, intra-Afghan peace talks and the use of Afghan soil by terrorist groups such as al-Qaeda and the Islamic State.
- While the **Taliban promised to reduce violence, join intra-Afghan peace talks and cut all ties with foreign terrorist groups**, the U.S. pledged to **withdraw all its troops.**

Concerns:

Stalemate between Taliban and Afghan government:

- The envisaged **intra Afghan peace talks haven't made any breakthrough** and the peace process has reached a stalemate.

Continuing violence:

- The Taliban though reduced hostilities against foreign troops, but have continued to **attack Afghan forces.**
- Afghanistan has also witnessed a series of **targeted killings** of journalists, activists and other civil society figures over the past many months.

Increasing Taliban influence:

- Ever since the U.S. troops began pulling out on May 1, the **Taliban have made rapid territorial advances**. The number of districts under its control has increased.
- The American withdrawal has turned the balance of power in the battleground in favour of the Taliban.
- As per the American intelligence community has concluded, Kabul could fall within six months to the Taliban.

India's stakes:

- The article welcomes **India's changed stance in engaging with the Taliban** given the most likely probability of Taliban playing a critical role in Afghanistan in the coming years.
- The three areas of interest in engaging with the Taliban include:
 - Protecting **India's investments** in Afghanistan
 - Preventing a future Taliban regime from being **used by Pakistan to suppress India's strategic reach in Afghanistan**
 - To thwart the **threat of Pakistan-backed anti-India terrorist groups** getting support from the Taliban.

2. EU's 'Green Passport'

Context:

- **EU Digital COVID Certificate (EUDCC) or the "Green Passport"** system proposed by the European Union.

Details:

- The EUDCC, or the Green Passport which would basically be a digital QR code, **would attest a person as being vaccinated against COVID-19**. It also attests if the person has had a recent negative test and/or is considered immune having previously contracted the illness and having recovered.
- This EUDCC has been recognised by **all 27 EU countries, as well as Switzerland, Liechtenstein, Iceland and Norway for intra-EU travel**.
 - Although not members of the EU, countries like Norway, Iceland, Switzerland and Lichtenstein are also part of what is referred to as the Schengen zone.
 - **Schengen Area** signifies a zone where 26 European countries, abolished their internal borders, for the free and unrestricted movement of people, in harmony with common rules for controlling external borders.

Concerns:

- The recognized list of vaccines **excludes Indian-made Covishield and Covaxin**, among others. This could adversely impact the prospects of Indian travellers to Europe.
- The move to implement the EUDCC has also given rise to concerns that these vaccine passports would be tantamount to **discriminating against travellers from developing countries with limited access to vaccines**.
 - Covishield has been distributed to 95 countries, mainly low- and middle-income countries of the global South.

India's response:

- The Indian government has warned that **India would initiate reciprocal harsh quarantine measures against countries** that discriminated against Indians.
- India has suggested that **all Indian-approved vaccines should be given recognition worldwide**, and has recommended certifying of such passengers via the Co-WIN website.

WHO's stand:

- In the recently published '**Policy considerations for implementing a risk-based approach to travel in the context of COVID-19**', the WHO categorically states that vaccine passports should not be made mandatory for travel and should be optional.

Recent developments:

- Following India's criticism, some nations have agreed to accept Indian vaccines also.

3. OPEC+ seeks consensus on oil output

Context:

- OPEC+ deliberations on oil output policy.

Background:

- Responding to oil demand destruction caused by the COVID crisis, OPEC+ had agreed in 2020 to cut output with plans to phase out the curbs by the end of April 2022.

OPEC+:

- The Organization of the Petroleum Exporting Countries (OPEC) and its allies as a grouping are known as OPEC+.
- It is a **grouping of oil-producing nations, made up of the OPEC members and 10 other non-OPEC members** including Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Russia, South Sudan and Sudan.

Details:

- While top producers like Saudi Arabia and Russia have been pushing to increase output, The United Arab Emirates has been blocking some aspects of the proposals.
- This has resulted in a failure to reach a deal on oil output policy.

Concerns:

- Without a deal, the OPEC+ could **limit supply even as rising oil prices are slowing economic recovery from the novel coronavirus crisis**.
 - The restrained production will not help bring down oil prices that have soared to 2-1/2 year highs up 40% compared to last year.
- The rise in oil prices is also **contributing to global inflation** which could dampen demand in the economy, thus slowing the economic recovery process.

4. China goes malaria-free with multi-pronged health strategy

Context:

- In the context of the **World Health Organization (WHO) declaring China “malaria-free”**, the article analyses China’s health strategy vis-à-vis malaria and the lessons it can offer India’s own efforts against malaria.
 - The “malaria-free” certification from the WHO requires four consecutive years of reporting no local cases.
 - China is the first country in the Western Pacific region to be declared malaria-free in more than 30 years.

Background:

Malaria:

- **Malaria is a mosquito-borne disease caused by a parasite.**
 - It is typically transmitted through the bite of an infected **Anopheles mosquito**. Infected mosquitoes carry the **Plasmodium parasite**

(**Plasmodium vivax**) When this mosquito bites a human, the parasite is released into the bloodstream.

- Malaria is typically found in tropical and subtropical climates where the parasites can live. It is **most prevalent in Africa, followed by Asia and Latin America**. It also affects people in the Middle East and Europe albeit to a much smaller degree.
- The number of malaria cases worldwide in 2019 was around 229 million, according to the World Malaria Report in 2020, with 409,000 lives lost to the mosquito-borne disease.
- The 2020 report said the majority of cases were reported in Africa, while **India and Southeast Asia recorded a significant drop**. Cases in India fell from approximately 20 million to 6 million, according to the report.

Details:

- China followed a **multi-pronged health strategy** that was able to entirely eliminate indigenous cases of malaria that once a major public health problem in China with millions of cases reported annually.
- Some of the major aspects of this strategy involved the following:

Mosquito control:

- **Targeting mosquito breeding grounds and using of insecticide spraying** have been a major aspects of China's mosquito control efforts.

Robust surveillance:

- The WHO has attributed a lot of credit to **China's '1-3-7 strategy'** for its success in tackling malaria.
 - "1-3-7 strategy" refers to a one-day deadline to report a malaria diagnosis, confirming a case and determining the spread by the third day, and measures taken to stop the spread by the seventh day, along with continued surveillance in high-risk areas.
- China has also **strengthened its laboratory networks** with quality laboratory equipment, which has let it detect cases of malaria in a fast and effective manner.
- This approach has allowed China to **detect cases early and prevent its spread**.

Robust public health system:

- Strong political commitment to strengthen the national health systems has been a major factor of strength in the fight against the disease.

- China's public health system offering **free of charge diagnosis and treatment of malaria** has played a major role in bringing down cases drastically.

Anti-malarial medicines:

- **The discovery of artemisinin under "the 523 project"** and its use in artemisinin-based combination therapies has provided one of the most effective antimalarial drugs.

Human resources:

- With assistance from the Global Fund to Fight AIDS, Tuberculosis and Malaria starting in 2003, China **stepped up training, staffing** to deal with the handling of the malaria disease. This has ensured the required human resources for the fight against Malaria.

Other interventions:

- China has been using **insecticide-treated nets** widely and distributed them free of cost to people living in vulnerable areas.

GS 3 : Economy, Science and Technology, Environment

5. New source of gravitational waves detected

Context:

- Scientists have for the first time detected gravitational waves produced by the **collision of a neutron star and a black hole.**

Background:

Neutron star:

- A neutron star is the **collapsed core of a massive supergiant star.** They result from the supernova explosion of a massive star, combined with gravitational collapse.
- Neutron star, are thought to be **composed primarily of neutrons.**
- Apart for black holes, neutron stars are the **smallest and densest currently known class of stellar objects.** Despite their small diameters – about 12.5

miles (20 kilometers) – neutron stars boast nearly 1.5 times the mass of our sun, and are thus incredibly dense.

- Once formed, they no longer actively generate heat, and cool over time; however, they may still evolve further through collision or accretion.

Details:

- The bursts of energy from the collisions were discovered when detectors on Earth spotted the mergers' **gravitational waves, cosmic energetic ripples soaring through space and time** as first theorized by Albert Einstein.
 - The reverberations from the happening was picked up from the **LIGO network of gravitational wave detectors**.
- While astronomers had seen gravitational waves from two black holes colliding with each other and two neutron stars colliding with each other, this is the first time they saw one of each crashing together.

Significance:

- The study of the neutron star-black hole systems would help answer many questions about star formation and calculating the expansion rate of our universe.

6. Can reducing cess levies ease high fuel prices?

Context:

- Ratings agency ICRA recently suggested cut cess levies on retail prices of petrol and diesel to ease price pressure on the fuels.

Background:

Historic high of retail prices of fuels:

- Though the base price of fuels have decreased over the years, **the share of taxes on the retail price has increased at a very high pace**. This has resulted in a scenario of historic high of retail prices of petrol and diesel.
- Experts attribute the current high fuel prices to higher **cesses being imposed by the Centre** and an **increase in Value Added Tax (VAT) rates by more than three-fourths of the State governments**.

Details:

- The ICRA anticipates an increase in the mobility of the population and economic recovery after the easing of curbs. It forecasts the consumption of petrol and diesel to grow in the financial year 2021-22. This it argues will help ensure sufficient revenues for the government pegged at about ₹3.6 lakh crore, about ₹40,000 crore more than in the last financial year.
- The forgo of this additional revenue itself could help cut up to ₹4.50 per litre for petrol and diesel each.

Significance:

Cool inflation level:

- Lower fuel prices will likely help cool inflation levels.
- Retail inflation based on the consumer price index (CPI) has been persistently higher than the RBI's medium-term target of 4%. **For May 2021, the provisional inflation reading was 6.3%**, owing to persistent price pressures in the transport and communication category, which includes the automotive fuels of petrol and diesel.

Allow RBI balance growth and inflation levels in the economy:

- The lower fuel prices will help ease retail inflation and thus allow the RBI to maintain a growth-supportive stance. It will allow the RBI to **retain its accommodative monetary stance** that includes **keeping benchmark borrowing interest rates substantially low**. This would incentivize demand for credit to both consume and invest in new business activity, thus spurring economic growth.

Counter arguments:

- A reduction in fuel cesses could **adversely affect the government's ability to pay interest and principal on oil bonds** issued to public oil marketing companies (OMCs) as compensation for subsidies.

Oil Bonds

- Oil bonds are special types of bonds that were issued to oil marketing companies (OMCs) like Indian Oil, Hindustan Petroleum and Bharat Petroleum. These companies received oil bonds from the government in place of cash subsidies.
 - OMCs were earlier receiving cash subsidies, as earlier these companies were not free to fix their own prices for petrol (before 2010) and diesel (before 2015). This meant that OMCs were often selling fuel far below

the international market price, often at significant expenditure to themselves.

- The Oil bonds are interest-bearing, having a fixed coupon rate and paid on a half-yearly basis.

7. Goldilocks Supernova

- Supernovae are usually categorized into two main types: **thermonuclear and iron-core collapse**. A thermonuclear supernova is the explosion of a white dwarf star after it gains matter in a binary star system. An iron core-collapse supernova occurs when a massive star – one more than about ten times the sun’s mass – runs out of nuclear fuel, and its iron core collapses, creating a black hole or neutron star.
- Between these two main types of supernovae are **electron-capture supernovae**. When the star is not light enough to avoid collapsing under its own core mass, and not heavy enough to prolong its life and die in some other way later, it forms an electron-capture supernova.
 - These stars stop fusion when their cores are made of oxygen, neon and magnesium; they aren’t massive enough to create iron.

Context:

- Scientists have discovered the first convincing evidence for **electron-capture supernova- a new type of stellar explosion**.
 - Electron-capture supernovae have been theorized for four decades, but their real-world examples remained elusive.

THE INDIAN EXPRESS

GS 2 : Polity, Governance, International Relations

1. Six Years of Digital India Programme

In news

- Recently, the Indian Prime Minister of India addressed a virtual event to mark the completion of six years of Digital India programme.

About Digital India Programme

- It was launched in 2015.
- The programme has been enabled for several important Government schemes, such as BharatNet, Make in India, Startup India, industrial corridors, etc.
- **Vision Areas:**
 - Digital infrastructure as Utility to Every Citizen.
 - Governance and services on demand.
 - Digital empowerment of citizens.
- **Objectives:**
 - To prepare India for a knowledge future.
 - To realize IT (Indian Talent) + IT (Information Technology) = IT (India Tomorrow).
 - Making technology central to enabling change.

Significant Achievements

- The introduction of Unified Payments Interface (UPI)
- Introduction of the e-KYC, DigiLocker and eSign were introduced to help businesses
- Introduction of JAM Trinity – Jan Dhan, Aadhar and Mobile to weed out leakages in the system
- India's rise in UN eGovernance Index
- SWAYAM free online courses

Challenges faced:

- Regulatory roadblock due to taxation and other regulatory guidelines

- Digital divide due to lack of internet connectivity
- Lack of coordination among various departments

2. Zydus Cadila seeks emergency use authorisation (EUA) for ZyCov-D vaccine

In news

- Zydus Cadila has applied to the Central Drugs Standard Control Organisation (CDSCO), the national drugs regulator, seeking emergency use authorisation (EUA) for ZyCov-D, its Covid-19 vaccine.
- If approved, ZyCov-D will be the world's first DNA vaccine against infection with SARS-CoV-2.

About ZyCov-D

- It is a “plasmid DNA” vaccine.
- It is a vaccine that uses a genetically engineered, non-replicating version of a type of DNA molecule known as a ‘plasmid’.
 - A plasmid is a small, often circular DNA molecule found in bacteria and other cells. They generally carry only a small number of genes, notably some associated with antibiotic resistance.
- The plasmids in this case are coded with the instructions to make the spike protein of SARS-CoV-2
- Vaccination gives the code to cells in the recipient's body, so they can begin making the spiky outer layer of the virus.
- The immune system is expected to recognize this as a threat and develop antibodies in response.
- The other unique thing about the vaccine is the way it is given. No needle is used – instead, a spring-powered device delivers the shot as a narrow, precise stream of fluid that penetrates the skin.
- ZyCov-D has been developed with the support of Department of Biotechnology and the Indian Council of Medical Research (ICMR).

Difference between conventional and gene-based vaccines

- In contrast to vaccines that employ recombinant bacteria or viruses, genetic vaccines consist only of DNA (as plasmids) or RNA (as mRNA), which is taken up by cells and translated into protein.
- Gene based vaccines use part of virus' own genes to stimulate an immune response.

Advantages of gene based vaccines

- Relatively inexpensive
- Easy to manufacture and use
- Safe and non-infectious
- Generates stronger type of immunity

3. Freight Smart Cities:

Context:

Commerce Ministry's Logistics Division unveils plans for 'Freight Smart Cities'.

- The objective is to improve the efficiency of urban freight and create an opportunity for reduction in the logistics costs.

Implementation:

- Under the initiative, **city-level logistics committees** would be formed.
- These committees would have related government departments and agencies at the local level, state and from the related central ministries and agencies.
- These would also **include private sector** from the logistics services and also users of logistics services.
- These committees would co-create **City Logistics Plans** to implement performance improvement measures locally.

Need for:

- **Final-mile freight movement** in Indian cities is currently responsible for 50 per cent of total logistics costs in India's growing e-commerce supply chains.
- Improving city logistics would also enable **efficient freight movement** and bring down the logistics costs boosting all sectors of the economy.
- Besides, **Demand for urban freight is expected to grow by 140 per cent** over the next 10 years.

Cities being covered:

Ten cities will be identified on immediate basis. It is planned to expand the list to 75 cities in the next phase before scaling up throughout the country including all state capitals and cities that have more than one million population.

4. President's Rule:

Context:

The Supreme Court has agreed to hear a plea seeking directions to the Centre to impose **President's Rule in West Bengal over alleged incidents of post-poll violence in the state.**

Allegations:

1. During the violence, the government and administration remained silent spectators and no protection was provided to the victims by them.
2. No appropriate action was taken against the culprits, due to which the life, liberty, dignity of the women and children are in peril and the future of Hindu residents is in jeopardy.

Background:

The **National Human Rights Commission** on June 21 has already set up an eight-member committee headed by NHRC member Rajiv Jain in compliance with a Calcutta High Court direction to investigate incidents of post-poll violence in West Bengal.

What is President's Rule in the Indian context?

Article 356 of the Constitution of India gives the President of India power to suspend state government and impose President's rule of any state in the country "if he is satisfied that a situation has arisen in which the government of the state cannot be carried on in accordance with the provisions of the Constitution".

- It is also known as 'State Emergency' or 'Constitutional Emergency'.
- Upon the imposition of this rule, **there would be no Council of Ministers.**

- The state will fall under **the direct control of the Union government, and the Governor will continue to head the proceedings, representing the President of India.**

Parliamentary Approval and Duration:

- A proclamation imposing President's Rule must be approved by both the Houses of Parliament within two months from the date of its issue.
- The approval takes place through simple majority in either House, that is, a majority of the members of the House present and voting.
- Initially valid for six months, the President's Rule can be extended for a maximum period of three years with the approval of the Parliament, every six months.

Report of the Governor:

Under Article 356, President's Rule is imposed if the President, upon receipt of the report from the Governor of the State or otherwise, is satisfied that a situation has arisen in which the government of the State cannot be carried on in accordance with the provisions of the Constitution.

Revocation:

A proclamation of President's Rule may be revoked by the President at any time by a subsequent proclamation. Such a proclamation does not require parliamentary approval.

5. OECD/G20 Inclusive Framework tax deal

Context:

India has joined **the G20-OECD inclusive framework deal that seeks to reform international tax rules and ensure that multinational enterprises pay their fair share wherever they operate.**

- 130 countries and jurisdictions, representing more than 90% of global GDP, have signed the deal.

Two pillars of framework:

1. **Dealing with transnational and digital companies.** This pillar ensures that large multinational enterprises, including digital companies, pay tax where they operate and earn profits.
2. **Dealing with low-tax jurisdictions to address cross-border profit shifting and treaty shopping.** This pillar seeks to put a floor under competition among countries through a global minimum corporate tax rate, currently proposed at 15%.

Expected outcomes:

If implemented, countries such as the Netherlands and Luxembourg that offer lower tax rates, and so-called tax havens such as Bahamas or British Virgin Islands, could lose their sheen.

Impact/implications on India:

India will have to roll back the equalisation levy that it imposes on companies such as Google, Amazon and Facebook when the global tax regime is implemented.

What is Equalisation levy?

- In 2016, India imposed an equalisation levy of 6% on online advertisement services provided by non-residents. This was applicable to Google and other foreign online advertising service providers.
- The government expanded its scope from April 1, 2020, by imposing a 2% equalisation levy on digital transactions by foreign entities operating in India or having access to the local market.

What is BEPS?

Base erosion and profit shifting (BEPS) refers to tax planning strategies used by multinational enterprises that exploit gaps and mismatches in tax rules to avoid paying tax.

- Developing countries' higher reliance on corporate income tax means they suffer from BEPS disproportionately.
- BEPS practices cost countries USD 100-240 billion in lost revenue annually.

GS 3 : Economy, Science and Technology, Environment

6. Financial Stability Report for July 2021 released by RBI

In news

- RBI has recently released the Financial Stability Report, July 2021.
- It is a **bi-annual report** that reflects risks to financial stability and the resilience of financial system.

Key highlights of the report

- The **gross non-performing assets (GNPAs)** ratio of banks may rise from 7.48% in March 2021 to 9.8% by March 2022.
- MSMEs face **huge stress** in meeting their payment obligations.
 - At the end of March 2021, 15.9% of loans of less than Rs. 25 crore to the MSEMME Sector had turned bad.
- **Capital to risk weighted assets ratio (CRAR)** of Scheduled commercial Banks (SCBs) increased to 16.03% in March 2021.
 - It is the ratio of a Bank's capital in relation to its risk weighted Assets and current liabilities.
- **Provision coverage ratio** stood at 68.86% in March 2021.
 - A high PCR ratio means most asset quality issues have been taken care of and the bank is not vulnerable.
- Demand for consumer credit across banks and non banking financial companies (NBFCs) has decreased amidst the second wave of Covid-19.
- Banks remain relatively unaffected by distractions caused due to the pandemic and are well protected by regulatory, monetary and fiscal Policies.

Prelims practice Questions

1. Which of the following are the literary works of Kalidasa?

1. Abhijnanashakuntala
2. Mudrarakshasa
3. Kumarasambhava
4. Mrichchhakatika
5. Meghaduta

Options:

- a. 1, 2 and 3 only
- b. 2, 3, 4 and 5 only
- c. 1, 3 and 5 only
- d. 2, 3 and 4 only

Answer: c

Explanation:

- Kalidasa is widely regarded as the greatest poet and dramatist in the Sanskrit language in India. His literary works are as follows:
- Plays: Malavikagnimitram, Abhijnanasakuntalam, Vikramorvasiyam.
- Epic Poems (Maha kayvas): Raghuvamsa, Kumarasambhava.
- Minor Poems (Khanda kavyas): Meghaduta, Ritusamhara.
- His works were likely authored within the 4th–5th century CE.

Note:

- Vishakhadatta wrote Mudrarakshasa.
- Mricchakatika is a Sanskrit play written by Shudraka.

2. Consider the following statements:

1. A debt is classified as non-performing, when the loan payments have not been made for a minimum period of 90 days.

2. Capital Adequacy Ratio is the ratio of a bank's capital in relation to its risk weighted assets and current liabilities.

Which of the statements given above is/are correct?

- A 1 only
B 2 only
C Both 1 and 2
D Neither 1 nor 2

Answer : C

Explanation

- **Non-Performing Asset (NPA)** refers to a **classification for loans or advances that are in default** or are in arrears on scheduled payments of principal or interest.
 - In most cases, **debt is classified as non-performing, when the loan payments have not been made for a minimum period of 90 days. Hence, statement 1 is correct.**
 - **Gross non-performing assets** are the sum of all the loans that have been defaulted by the individuals who have acquired loans from the financial institution.
 - **Net non-performing assets** are the amount that is realized after provision amount has been deducted from the gross non-performing assets.
- **Capital Adequacy Ratio** is the **ratio of a bank's capital in relation to its risk weighted assets and current liabilities.**
 - It is also known as Capital-to-Risk Weighted Asset Ratio (CRAR). **Hence, statement 2 is correct.**
 - It is **decided by central banks to prevent commercial banks** from taking excess leverage and becoming insolvent in the process.
- Provisioning Coverage Ratio refers to the prescribed percentage of funds to be set aside by the banks for covering the prospective losses due to bad loans.

3. Base Erosion and Profit Shifting (BEPS) sometimes seen in the news refers to

- a. Simplifying and harmonizing international customs procedures globally
b. Anti-Dumping Measures

- c. Tax planning techniques employed by companies to exploit gaps in international and domestic tax laws
- d. Criminals using cryptocurrency for illegal activities

Answer: c

Explanation:

- Base erosion and profit shifting (BEPS) refers to corporate tax planning strategies used by multinationals to shift profits from higher-tax jurisdictions to lower-tax jurisdictions.
- This practice erodes the tax-base of the higher-tax jurisdictions.

4. Consider the following statements with respect to Asian elephants

1. Adult male Asian elephants are less social than females.
2. Old males were found mostly in the company of their age peers and less frequently with young males.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

- The Asian elephant is a charismatic species with a long history of co-existence with humans.
- Yet works on male societies of wild elephants based on long-term observations are rare.
- To fill this gap, researchers from Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), an autonomous Institute of the Department of Science and Technology studied associations of male Asian elephants Nagarahole and Bandipur National Parks.

Highlights of the Study

- The time spent by male Asian elephants in all-male and mixed-sex groups depended on the age of the male.

- Adult Asian male elephants preferred to spend their time alone than in mixed-sex or in all-male groups.
- Besides, old males were found mostly in the company of their age peers and less frequently with young males (15 to 30 years of age).
- Also, young males did not disproportionately initiate associations with old males.
- Adult male Asian elephants are less social than females.
- They enter musth -- a mate-searching strategy for old (above 30 years of age) males, annually.
- The researchers hypothesised that when the adult males enter musth, dominance relationships may affect the number of mating opportunities they procure.
- Hence, it might be more crucial for old males than for young males to test strength with each other and settle dominance relationships during their nonmusth time.
- On the other hand, since young males associated less with females during musth than non-musth time, they might also be using their non-musth time to search for mating opportunities.

5. With reference to 'IFC Masala Bonds', sometimes seen in the news, which of the statements given below is/are correct?

1. The International Finance Corporation, which offers these bonds, is an arm of the World Bank.
2. They are the rupee-denominated bonds and are a source of debt financing for the public and private sector.

Select the correct answer using the code given below.

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer: c

Explanation:

- Masala bonds are bonds issued outside India but denominated in Indian Rupees, rather than the local currency.
- It is a debt instrument issued by an Indian entity in foreign markets to raise money, in Indian currency, instead of dollars or local denomination.

- They are a source of debt financing for the public and private sector.
- Masala is an Indian word and it means spices. The term was used by the International Finance Corporation to evoke the culture and cuisine of India.
- The International Finance Corporation, which offers these bonds, is an arm of the World Bank.

6. Consider the following statements with respect to *Heat Dome*

1. It is essentially a mountain of warm air built into a very wavy jet stream, with extreme undulations.
2. It develops when there is a large poleward shift in the jet stream.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

Heat Dome

- The causes of heat dome can be understood by considering Pacific Ocean to a large swimming pool in which the heater is turned on.
- The portions of the pool close to the heating jets will warm up faster once the heater is on and therefore, the temperature in that area will be higher.
- In the same way, the western Pacific Ocean's temperatures have increased in the past few decades and are relatively more than the temperature in the eastern Pacific.
- The strong change in ocean temperature from the west to the east is what a team of scientists believe is the reason for the heat dome.

Mains Practice Questions

1. "India's distinct economic and demographic position allows it to shape, influence and constrain global technology rules that serve its strategic interests". Discuss the statement in the wake of the ban of Chinese apps. (250 words)

Approach

- Introduce by briefly writing India's economic and demographic position in the world.
- Discuss how India can influence the global technology rules to serve its strategic interests.
- Mention some of the issues with India's own technology rules and cyber space.
- Give a way forward to conclude.

2. Discuss how far Environment Impact Assessment (EIA) has been useful for our environment as well as society? (250 words)

Approach

- Write a few introductory lines about the Environment Impact Assessment (EIA).
- Discuss the importance of EIA for the environment as well as society.
- Discuss the shortcomings of the EIA process.
- Provide solutions to remove such shortcomings.
- Conclude suitably.

