



RACE IAS

Daily current affairs

10 May 2022

Value of the vote of MPs in presidential elections:

Context:

Due to the absence of a legislative assembly in Jammu and Kashmir, the value of the vote of a Member of Parliament is likely to go down to 700 from 708 in the presidential polls scheduled in July.

Background:

- Before it was bifurcated into two union territories of Ladakh, and Jammu & Kashmir in August 2019, the erstwhile state of J&K had 83 assembly seats.
- According to the Jammu and Kashmir Reorganisation Act, the Union Territory of J&K will have a legislative assembly, while Ladakh will be governed directly by the Centre.

What is the value of the vote of an MP?

The value of the vote of an MP in a **presidential election** is based on the number of elected members in legislative assemblies of states and union territories, including Delhi, Puducherry and Jammu and Kashmir.

Value of vote - the trend:

- The value of vote of a Member of Parliament for the first Presidential election in 1952 was 494.
- It increased marginally to 496 in the 1957 presidential election, followed by 493 (1962), 576 (1967 and 1969).

- In the 1974 presidential election, the value of vote of an MP was 723. It has been fixed at 702 for the presidential elections from 1977 to 1992.

How is the President elected?

- The Indian President is elected through an electoral college system, wherein the votes are cast by national and State-level lawmakers.
- The elections are conducted and overseen by the Election Commission (EC) of India.

Electoral College:

The electoral college is made up of all the elected members of the Upper and Lower Houses of Parliament (Rajya Sabha and Lok Sabha MPs), and the elected Members of the Legislative Assemblies of States and Union Territories (MLAs).

What electoral system/process is followed for the election to the office of the President?

The election of the President shall be held in accordance with the system of proportional representation by means of single transferable vote and the voting at such election shall be by secret ballot.

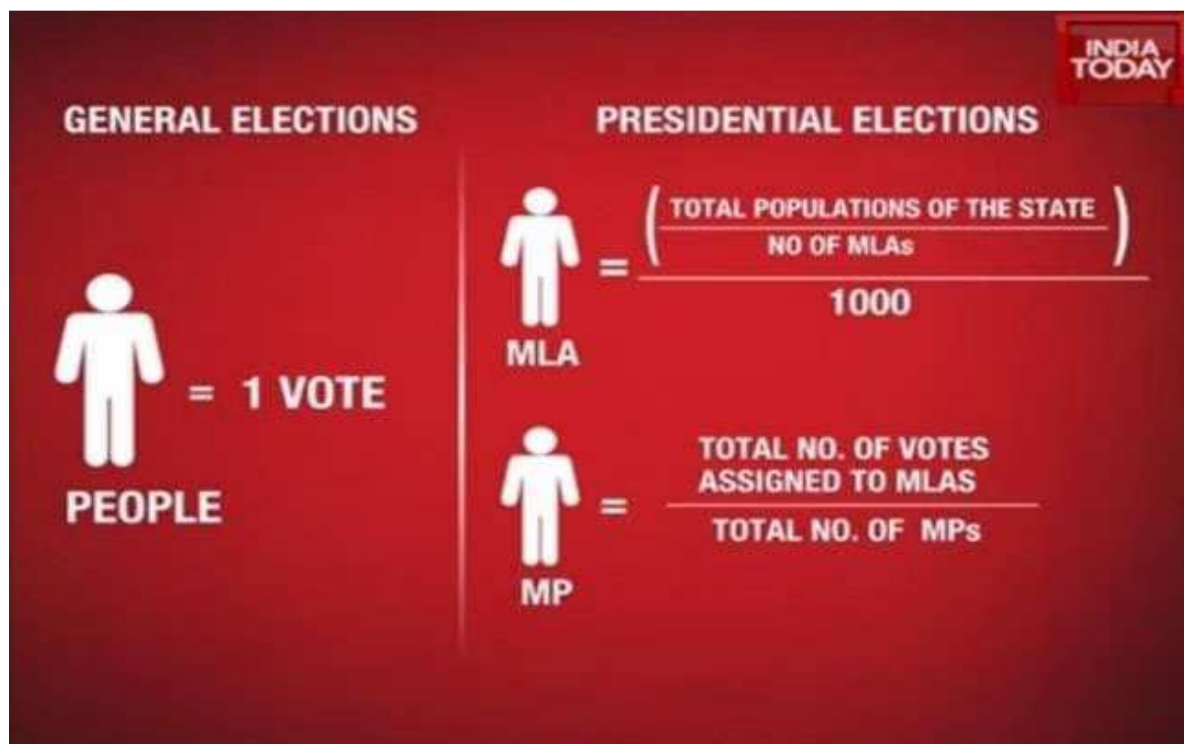
Procedure:

- Before the voting, comes the nomination stage, where the candidate intending to stand in the election, files the nomination along with a signed list of 50 proposers and 50 seconders.
- These proposers and seconders can be anyone from the total members of the electoral college from the State and national level.
- An elector cannot propose or second the nomination of more than one candidate.

What is the value of each vote and how is it calculated?

To calculate the number of voters each legislator represents, the total population of the state is divided by the number of assembly members and then divided by 1,000.

- The combined value of all the MPs' votes is roughly equal to the combined value of all the MLAs'.



Deciding the winner:

1. The winner of the Presidential election is not the person who gets the most number of votes, but the person who gets more votes than a certain quota.
2. The quota is decided by adding up the votes polled for each candidate, dividing the sum by 2 and adding '1' to the quotient.
3. The candidate who polls more votes than the quote is the winner. In case, no one gets more votes than the quota, then the candidate with the lowest number of votes is eliminated.
4. Then, the eliminated candidates' ballot papers are distributed between the remaining hopefuls based on those ballot papers' second preference choice.
5. The process of counting the total votes for each candidate is then repeated to see if any one polls above the quota.

Sources: The Print.

China - Taiwan relations:

Context:

Taiwan hopes that the world would sanction China like it is sanctioning Russia for its war on Ukraine if Beijing invaded the island.

- Taiwan has joined in Western-led sanctions on Russia for its invasion of Ukraine.

Why war on Ukraine has brought the spotlight on to Taiwan?

Ukraine's plight has won broad public sympathy in Taiwan due to what many people view as the parallels between what is happening in Ukraine and what could happen if China ever uses force to bring Taiwan it claims as its own under Chinese control.

- Taiwan has raised its alert level since the Ukraine war began, wary of China making a similar move, though the government in Taipei has reported no signs of an imminent Chinese attack.

Recent clashes:

China's armed forces carried out another round of exercises near Taiwan last week to improve joint combat operations.

- Taiwan has complained for the past two years about frequent Chinese military activity near it, mostly concentrated in the southern and southwestern part of the island's air defence identification zone, or ADIZ.

China- Taiwan relations- Background:

China has claimed Taiwan through its "one China" policy since the Chinese civil war forced the defeated Kuomintang, or Nationalist, to flee to the island in 1949 and has vowed to bring it under Beijing's rule, by force if necessary.

- While Taiwan is self-governed and de facto independent, it has never formally declared independence from the mainland.
- Under the "one country, two systems" formula, Taiwan would have the right to run its own affairs; a similar arrangement is used in Hong Kong.

Presently, Taiwan is claimed by China, which refuses diplomatic relations with countries that recognise the region.



India's position on Taiwan:

- India's policy on Taiwan is clear and consistent and it is focused on promoting interactions in areas of trade, investment and tourism among others.
- Government facilitates and promotes interactions in areas of trade, investment, tourism, culture, education and other such people-to-people exchanges.
- However, India doesn't have formal diplomatic relations with Taiwan, but both sides have trade and people-to-people ties.

Indo- Taiwan relations:

- Although they do not have formal diplomatic ties, Taiwan and India have been cooperating in various fields.
- India has refused to endorse the "one-China" policy since 2010.

Sources: the Hindu.

Lunar eclipse 'Blood moon':

Context:

On 16 May 2022, a total lunar eclipse or Chandra Grahana will occur over South America, most of North America and parts of Europe and Africa.

- This will be the second eclipse of the year, after the April 30/May 1 partial solar eclipse that was visible in parts of the southern hemisphere.
- During this, the first Blood Moon of 2022 will also become more clearly visible.

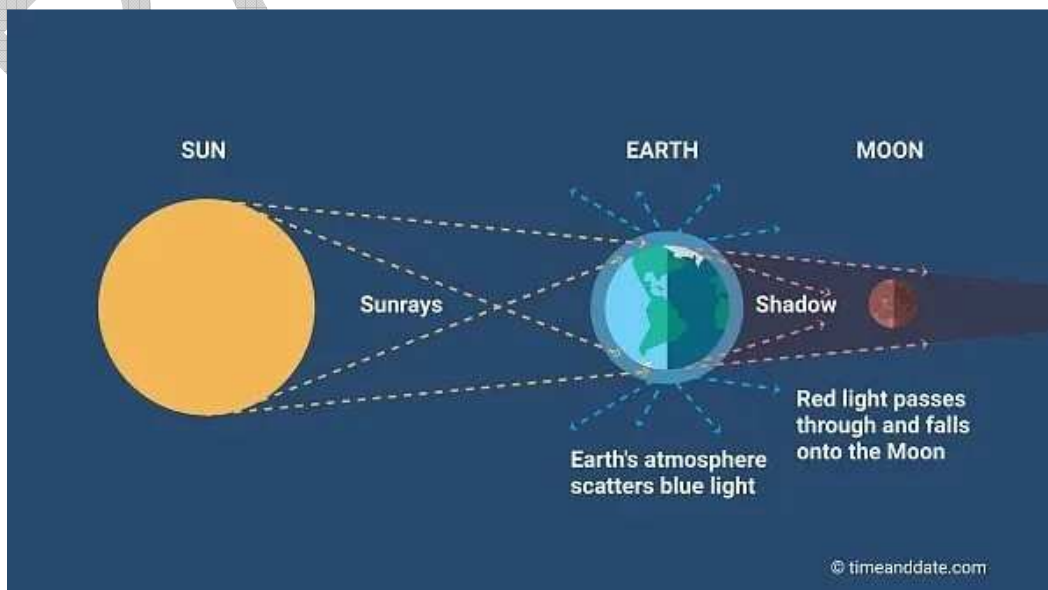
What is the Total lunar eclipse?

During a total lunar eclipse, the Moon usually turns a deep, dark red because it is illuminated by light that has passed through the Earth's atmosphere and has been bent back towards the Moon by refraction.

- A total lunar eclipse occurs when the Moon and the Sun are on exact opposite sides of Earth.

Why is it red (Blood Moon)?

- The red colour is because of the way light travels through the Earth's atmosphere. Sunlight is made of several colours and they all have different wavelengths.
- Depending on the way they travel through our atmosphere, we see different colours. That's why the sun and sky have different colours during sunrise and sunset.
- Blues and purples have shorter wavelengths and scatter in our atmosphere, giving the sky its inky colour, but reds and oranges have the highest wavelengths and pass through our atmosphere before it is bent or refracted around Earth, hitting the surface of the Moon and making it red.



What is a supermoon?

A supermoon occurs when the Moon's orbit is closest to the Earth at the same time that the Moon is full. In a typical year, there may be two to four full supermoons and two to four new supermoons in a row.

Sources: Times of India.

Coal gasification:

Context:

To help India become energy independent, the Ministry of Coal has proposed 50% concession in revenue share to promote **coal gasification**.

Eligibility:

If the successful bidder consumes the coal produced either in its own plant(s) or plant of its holding, subsidiary, affiliate, associate for coal gasification or liquefaction or sells the coal for coal gasification or liquefaction on an yearly basis, subject to conditions that at least 10% of scheduled coal production as per approved mining plan for that year shall be consumed or sold for gasification or liquefaction, then the bidder can avail of concessions.

What is Coal Gasification?

- It is considered a cleaner option compared to burning coal.
- It is the process of producing syngas, a mixture consisting of carbon monoxide (CO), hydrogen (H₂), carbon dioxide (CO₂), natural gas (CH₄), and water vapour (H₂O).

How is it done?

It facilitates utilization of the chemical properties of coal.

- During gasification, coal is blown with oxygen and steam while also being heated under high pressure.
- During the reaction, oxygen and water molecules oxidize the coal and produce syngas.

Benefits:

- Transporting gas is a lot cheaper than transporting coal.
- Help address local pollution problems.

- Has greater efficiency than conventional coal-burning.

Concerns and challenges:

- Coal gasification is one of the more water-intensive forms of energy production.
- There are also concerns about water contamination, land subsidence and disposing of waste water safely.

India's Coal dependency:

India is the second largest importer, consumer and producer of coal, and has the world's fourth largest reserves (**Reference**). It mainly imports from Indonesia, Australia and South Africa.

Recent Reforms In Coal Sector:

Commercial mining of coal allowed, with 50 blocks to be offered to the private sector.

Entry norms liberalised as it has done away with the regulation requiring power plants to use "washed" coal.

Coal blocks to be offered to private companies on a revenue sharing basis in place of fixed cost.

Coal bed methane (CBM) extraction rights to be auctioned from Coal India's coal mines.

Sources: Livemint.

What is the Line of Actual Control (LAC)?

Context:

The Indian Army has said that to prevent smaller incidents from escalating, the Indian Army and the Chinese People's Liberation Army are in regular contact through the hotlines along the **Line of Actual Control (LAC)**, and the practice of 'body pushing' has been stopped.

What's the present status?

China's mobilisations along the Line of Actual Control (LAC) in May 2020 sparked a crisis that, two years on, still remains unresolved.

- The 2020 crisis served as a “wake-up call” and there was “greater focus” on dealing with the threat along the northern borders.

In 2017, India and China were locked in a 73-day-long military standoff at Doklam, at the Bhutan-China-India trijunction.

What’s the bigger picture?

- The two countries have fought only one war, in 1962.
- But simmering tensions involve the risk of escalation - and that can be devastating given both sides are established nuclear powers. There would also be an economic fallout as China is one of India’s biggest trading partners.
- The military stand-off is mirrored by growing political tension, which has strained ties between India and China.
- Observers say talks are the only way forward because both countries have much to lose.

India’s approach henceforth:

- India has developed strategic patience as it is negotiating from a position of assertiveness to resolve the two-year standoff in eastern Ladakh.
- India wants forces to step back, to de-escalate, but there is a difference of perception on how that should be done.
- Regular hotline exchanges will be carried out.
- The force deployment and equipment deployment is calibrated in nature.

India- China Border and the evolution of LAC:

- India and China share a 3,488 km long boundary. Unfortunately, the entire boundary is disputed. The line, which delineates the boundary between the two countries, is popularly called the McMahon line, after its author Sir Henry McMahon.
- In 1913, the British-India government had called a tripartite conference, in which the boundary between India and Tibet was formalized after a discussion between the Indian and the Tibetans. A Convention was adopted, which resulted in the delimitation of the Indo-Tibetan boundary. This boundary is, however, disputed by China which terms it as illegal.

- In 1957, China occupied Aksai Chin and built a road through it. This episode was followed by intermittent clashes along the border, which finally culminated in the border war of 1962.
- The boundary, which came into existence after the war, came to be known as Line of Actual Control (LAC). It is a military held line.

Sources: the Hindu

Rejuvenation of Dal Lake:

- To combat the increasing pollution and rejuvenate Dal Lake, a unique initiative known as 'Athwas' has been launched by the Lieutenant Governor Manoj Sinha.
- 'Athwas' is a unique partnership between citizens and authorities for the rejuvenation of Lake. It involves community participation.
- Under the initiative, the de-weeding and dredging will be conducted in collaboration with the citizens.

About Dal:

- It was known as the summer capital of Jammu and Kashmir.
- It is named the "Jewel in the crown of Kashmir" or "Srinagar's Jewel".
- The lake is also an important source for commercial operations in fishing and water plant harvesting.
- The lake is located in the Zabarwan mountain valley, in the foothills of the Shankracharya hills, which surround it on three sides.
- The lake has four main interconnected basins namely, Hazratbal, Bod dal, Gagribal and Nagin.
- The floating gardens here, known as "Raad" in Kashmiri, blossom with lotus flowers during July and August.

India's total fertility rate:

As per the report of the fifth round of the National Family Health Survey (NFHS-5):

- The total fertility rate of India has declined from 2.2 to 2.0 between the fourth National Family Health Survey (NFHS) conducted in 2015-16 and the fifth one in 2019-21.
- This indicates the significant progress of population control measures.

- There are only five states in India, which are above the replacement level of fertility of 2.1. This includes Bihar (2.98), Meghalaya (2.91), Uttar Pradesh (2.35), Jharkhand (2.26) and Manipur (2.17).

The other key highlights of the survey include _ institutional births having increased from 79% to 89% in India and in rural areas around 87% births being delivered in institutions and the same is 94% in urban areas.

TFR:

The Total Fertility Rate (TFR) is measured as the average number of children per woman.

LOWEST RATE AMONG BUDDHISTS

Community	NFHS-5 (2019 to 2021)	NFHS-4 (2015 to 2016)	NFHS-3 (2005 to 2006)	NFHS-2 (1998 to 1999)	NFHS-1 (1992 to 1993)	% change since NFHS-4	% change since NFHS-1
Hindu	1.94	2.13	2.59	2.78	3.3	-8.9	-41.2
Muslim	2.36	2.62	3.4	3.59	4.41	-9.9	-46.5
Christian	1.88	1.99	2.34	2.44	2.87	-5.5	-34.5
Sikh	1.61	1.58	1.95	2.26	2.43	1.9	-33.7
Buddhist/ Neo-Buddhist	1.39	1.74	2.25	2.13	NA	-20.1	NA
Jain	1.6	1.2	1.54	1.9	NA	33.3	NA
India	2	2.2	2.7	2.9	3.4	-9.1	-41.2

About NFHS survey:

- NFHS is a large-scale, multi-round survey conducted in a representative sample of households throughout India.
- All NFHSs have been conducted under the stewardship of the Ministry of Health and Family Welfare, Government of India, with the International Institute for Population Sciences (IIPS) Mumbai, serving as the nodal agency.
- NFHS-5 includes some new focal areas, such as death registration, pre-school education, expanded domains of child immunisation, components of micro-nutrients to children, menstrual hygiene etc.

Every National Family Health Survey (NFHS) has two specific goals to fulfill. They are:

- To provide essential data needed by the Ministry of Health and Family Welfare and other agencies for informed decision making and policy and programme intervention purposes.
- To provide insight regarding important emerging health and family welfare issues.

Network Operations Control Center (NOCC):

Why in News?

To enhance ease of doing business, the Department of Telecom (DoT) has removed Network Operation and Control Centre (NOCC) charges for the use of space segments for all services like VSAT, satellite telephony etc. for which permits are issued by the department.

- The DoT earlier levied ₹ 21 lakh per transponder per annum for 36 megahertz of spectrum on a pro-rata basis as NOCC charges.

About NOCC:

The Network Operations Control Center (NOCC) was created under the DoT to control the transmissions from ground segment (satellite earth stations) along with the master control facility under Department of Space to manage the operation of satellites in orbit.

What is Khalistan Movement?

It is the fight for a separate Sikh state and owes its origins to the Punjabi Suba Movement.

- The Akali Dal - a Sikh-dominated political party - sought to create a separate Sikh Suba or Province.
- When the States Reorganization Commission, constituted to assess the demand for separate states by linguistic groups, made its recommendations, it rejected the Akali Dal's demand.
- The state was trifurcated into Punjabi-majority Punjab, Hindi-majority Haryana and the Union Territory of Chandigarh. Some hilly regions of the state were merged into Himachal Pradesh.

Why in News?

Khalistan flags were found tied on the main entrance gates and walls of Himachal Pradesh legislative assembly recently.

- Slogans were also written on the walls of the assembly complex. The flags have now been removed by the administration.

State of World's Birds report:

The State of World's Birds report was recently published.

- It is a peer-reviewed journal.
- It is BirdLife International's flagship science publication, using birds to assess the condition of our ecosystems as a whole.

Highlights of the 2022 report:

- Around 48% of bird species worldwide are known or suspected to be undergoing population declines.
- In India, nearly 80% species are declining in numbers, and almost 50% plummeting strongly.
- Around 57% of North American species are recording declining trends, a net loss of almost 3 billion birds since 1970.
- The situation is similar in the European Union, where trends across 378 species indicate an overall decrease in breeding bird abundance of 17-19% between 1980 and 2017.
- The study found that bird species and abundance data from the tropics is scarce but in many countries such as India, citizen science driven data was available.

Reasons behind this decline:

- The report has attributed the threat to almost half of the 10,994 recognised extant species of birds to the expanding human footprint on the natural world and climate change.
- The degradation and loss of natural habitats as well as direct overexploitation of many species are the key threats to avian biodiversity.

BirdLife International is a global partnership of non-governmental organizations that strives to conserve birds and their habitats.

- Headquarters: United Kingdom Cambridge, United Kingdom.

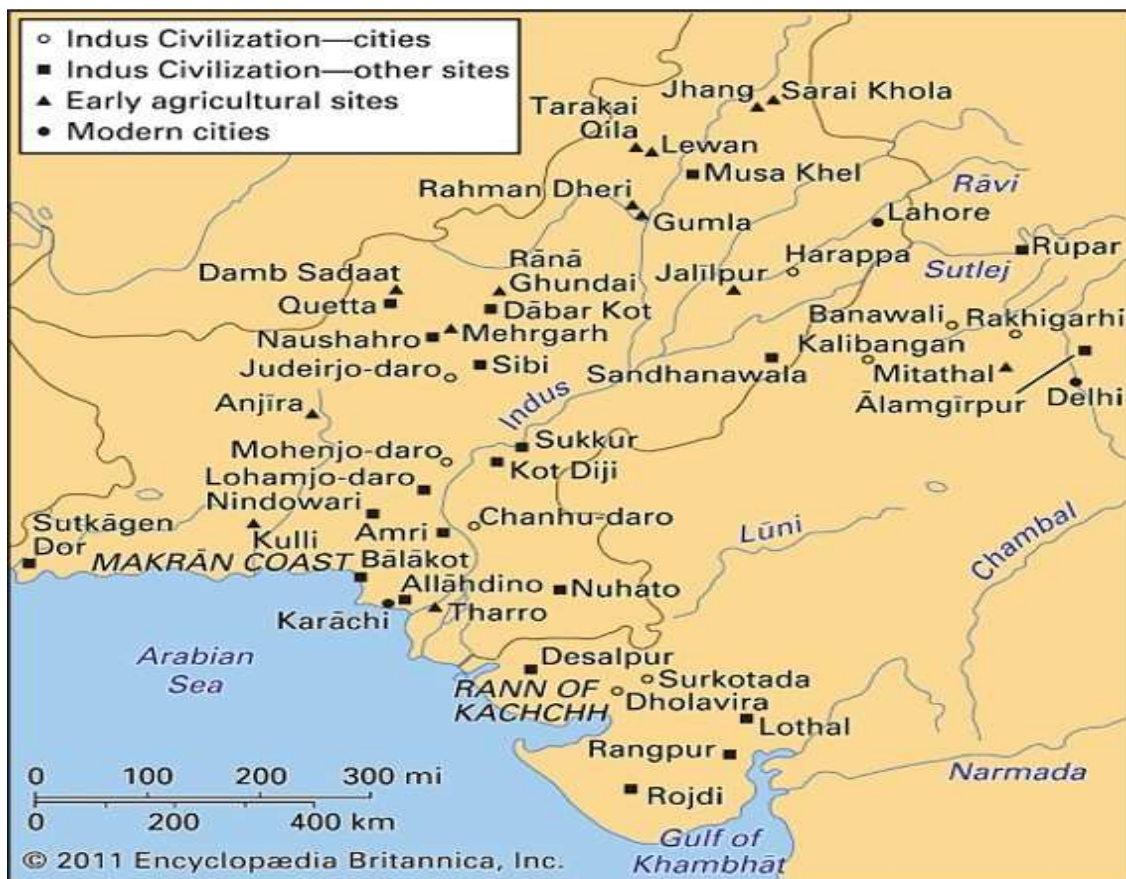
Rakhigarhi:

- Rakhigarhi, in Haryana, became an archaeological hotspot when Amarendra Nath, former director of the Archaeological Survey of India (ASI), undertook excavations at the site in 1997.
- It is a 5,000-year-old site that showcases continuity from the Harappan age to the present times. The village also has havelis that are a couple of hundred years old.
- The site is located in the Sarasvati river plain, some 27 km from the seasonal Ghaggar river.
- The Rakhigarhi site is one of the “five iconic sites” declared by the Central government in the Union budget 2020-21.

Why in the News?

DNA samples collected from two human skeletons unearthed at Rakhigarhi have been sent for scientific examination.

- The outcome might tell about the ancestry and food habits of people who lived in the Rakhigarhi region thousands of years ago.



Shigella:

The recent food poisoning event in Kerala that claimed the life of a 16-year-old girl who ate chicken shawarma at a restaurant was caused by Shigella germs.

What is Shigella?

- Shigella is a bacterial infection produced by the enterobacter family of bacteria and is one of the most common causes of diarrhoea worldwide.
- Shigellosis is the infection it causes.
- Infection with Shigella causes diarrhoea (occasionally bloody), fever, and stomach cramps in the majority of patients.
- The disease is easily transmitted through direct or indirect contact with the patient's waste.
- Antibiotics should be provided to people who are sick or have underlying problems.



Monkeypox:

- The monkeypox virus is an orthopoxvirus, which is a genus of viruses that also includes the variola virus, which causes smallpox, and vaccinia virus, which was used in the smallpox vaccine.
- Monkeypox is a zoonosis, that is, a disease that is transmitted from infected animals to humans.
- Monkeypox virus infection has been detected in squirrels, Gambian poached rats, dormice, and some species of monkeys.
- Monkeypox causes symptoms similar to smallpox, although they are less severe.
- While vaccination eradicated smallpox worldwide in 1980, monkeypox continues to occur in a swathe of countries in Central and West Africa, and has on occasion showed up elsewhere.

Why in the News?

The U.K. health authorities have confirmed a case of monkeypox.

- The first-ever recorded occurrence of the monkeypox virus in the U.K. was in 2018, and since then a handful of cases have been confirmed by health authorities.

CAPF Punarvaas:

The Ministry of Home Affairs has launched 'CAPF Punarvaas', through the Welfare & Rehabilitation Board (WARB).

- This has been launched with an aim to facilitate retired Central Armed Police Force (CAPF) and Assam Rifle personnel to secure employment with private security agencies.
- The portal will help retired personnel seeking re-employment to find an appropriate match by uploading their personal details on the WARB website along with their area of expertise and preferred employment location.

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