

13 Apr 2019: UPSC Exam Comprehensive News Analysis

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Category: INTERNATIONAL RELATIONS

1. Modi to get Russia's highest civilian award

Context:

Russia announced that President Vladimir Putin will confer its highest civilian award on Prime Minister Narendra Modi.

Details:

- Russia's highest civilian award - the "Order of the Holy Apostle Andrew the First," will be awarded to PM Narendra Modi for his work on bilateral ties.
- Thanking Mr. Putin for the honour, Mr. Modi said that the cooperation between India and Russia had led to extraordinary outcomes for Indian citizens.

- “President Putin remains a source of great strength for the India-Russia friendship. Under his visionary leadership, bilateral and multilateral cooperation between our nations has scaled new heights,” he added.
- Welcoming the award from Russia, External Affairs Minister said this was the sixth international award for PM Modi in five years, and came in “recognition of India-Russia’s true friendship.

The Order of the Holy Apostle Andrew the First:

- The Order of the Holy Apostle Andrew the First is awarded to prominent government and public figures, prominent representatives of science, culture, art and various sectors of the economy for “exceptional services that contribute to the prosperity, greatness and glory of Russia”.
- It was first awarded by former Russian Tsar ‘Peter the Great’ in 1698 and subsequently discontinued.
- In 1998, former President Boris Yeltsin reinstated the honour by a presidential decree.
- Previous recipients include Chinese President Xi Jinping, and presidents of Azerbaijan and Kazakhstan, former Soviet leader Mikhail Gorbachev and author Aleksandr Solzhenitsyn.

2. Malaysia approves Chinese project after price is slashed

Context:

Malaysia will resume work on the multi-billion dollar East Coast Rail Link (ECRL) after months of negotiations with the China Communications Construction Company (CCCC) and the Chinese government brought the cost down by a third.

Details:

- China agreed to cut by a third the cost of a rail project in Malaysia, a move that seemed to acknowledge mounting international scepticism about its continent-spanning infrastructure programme- the Belt and Road Initiative.
- Malaysian officials announced a new agreement with CCCC, a state-owned company that would allow the rail project to go forward, nearly a year after the Malaysian government suspended it.
- The project is meant to connect ports on Malaysia’s east and west coasts.
- The project, known as the East Coast Rail Link, became a political lightning rod after Mr. Mahathir (Prime Minister of Malaysia) used its cost as an issue on his way to winning the election last year.

China’s BRI:

- China’s Belt and Road Initiative, of which the Malaysian project is one element, is an ambitious plan spearheaded by Chinese President Xi Jinping to connect economies across Asia, Africa and Europe.
- But it has also become a symbol of the sometimes high cost of projects that China uses to bolster its influence abroad.
- Some of the early Belt and Road projects have come under scrutiny as China brought in its own workers and provided engineering expertise, but its financial support often took the form of huge loans to local governments.
- In recent months, Chinese officials have to some extent put the brakes on the initiative, amid allegations of overspending and corruption in countries like Malaysia, Sri Lanka and Pakistan.

C. GS3 Related

Category: INTERNAL SECURITY

1. Plea to remove dual control of Assam Rifles

Context:

The Delhi High Court has sought response from Cabinet Secretary, Government of India, on a petition seeking directions to bring the Assam Rifles out of the dual control of the Union Home Ministry and the Defence Ministry (MoD).

Issue:

- At present, the administrative control of the Assam Rifles lies with the Home Ministry, while the operational control is with the Defence Ministry leading to the violations of rights of the troopers according to the All India Assam Rifles Ex-Servicemen Welfare Association.
- The petitioner said that the objective and functions of Assam Rifles were that of a military and para military force and its categorisation as a police force was arbitrary, unreasonable and in violation of the rights of its personnel.

Details:

- The petition filed by the Assam Rifles Ex-Servicemen Welfare Association has sought directions to the government to bring the Assam Rifles under one control, preferably under the MoD.
- A Bench of Justice S. Muralidhar and Justice I.S. Mehta, in its April 9 order, had noted that the Union Home Ministry has placed the issue before the Cabinet Committee on Security (CCS).
- The court is therefore constrained now to issue a notice to the CCS to explain what decision it has taken on the note forwarded to it by the MHA .

Assam Rifles:

- The Assam Rifles (AR) is a Central Para Military Force (CPMF) along with two other forces — Special Frontier Force and Coast Guard.
- However, only the Assam Rifles functions under the administrative control of the Union Home Ministry.
- The Assam Rifles was formed under the British in 1835 by the name of Cachar Levy and had a number of names -- the Assam Frontier Police (1883), the Assam Military Police (1891) and Eastern Bengal and Assam Military Police (1913), before finally becoming the Assam Rifles in 1917.
- At present, it has 46 battalions and fulfils the dual role of maintaining internal security in the North-eastern region and guarding the Indo-Myanmar Border.

Category: SCIENCE AND TECHNOLOGY

1. NASA's 'twins study' highlights effects of spaceflight on body

Context:

NASA has conducted a "Twin Study" - the most comprehensive review of the response of the human body to spaceflight ever conducted.

Details:

- A NASA study of a U.S. astronaut who spent a year in space while his twin brother remained on the earth is providing insights into the effects of spaceflight on the human body.
- U.S. astronaut Scott Kelly spent a year on the International Space Station while his identical twin Mark Kelly, also a former NASA astronaut, stayed on the ground.
- The researchers who carried out the “NASA Twins Study” found that most of the changes to Mr. Scott’s body during his time in space returned to normal within months of his return to the earth — although not all of them.
- In one test, flu vaccination delivered a similar immune response in them.
- Cognitive tests before, during and after the flight found that Mr. Scott’s cognitive performance declined post-flight in terms of speed and accuracy.
- Generally, thousands of gene and molecular changes occur as someone goes into space. Virtually all of those returned to normal (in Scott) by six months.

Significance of the study:

- Using Mr. Mark as a baseline, 84 researchers at 12 universities documented the molecular, cognitive and physiological effects of Mr. Scott’s year in space.
- The study provided insight into the body’s response to space flight. It showed that long-term space missions are likely to cause major changes to astronauts’ metabolisms, genetics and cognitive performance.
- The main findings in Mr. Scott, were that the carotid artery wall became thicker early in flight and remained so throughout the mission.
- The findings, published in the journal Science, were encouraging to scientists and engineers envisioning interplanetary travel such as an eventual trip to Mars, a mission that could last two to three years.
- The study will guide future biomedical space research and allow a safer journey to and from Mars. Specifically, the findings could shape NASA’s 2020 mission to Mars — a journey that would take astronauts at least three years.

Twins Paradox:

- Mark Kelly is six minutes older than his brother.
- But Scott Kelly says he’s actually a few milliseconds younger still, due to having spent 500 more days in space than his astronaut brother.
- Einstein’s special theory of relativity leads to a “twins paradox” in which someone moving at a high velocity, such as 17,500 mph in low Earth orbit, ages more slowly than a twin on Earth.

D. GS4 Related

Nothing here for today!!!

E. Editorials

Category: INTERNATIONAL RELATIONS

1. A grim future in Israel

What’s in the news?

- With criminal indictment imminent on charges of corruption, Israel's Prime Minister Benjamin Netanyahu pulled off a fourth consecutive win in general elections to the Knesset on April 9, 2019.

Note to Students:

- From a UPSC point of view, it is advisable to look at the wider ambit of India-Israel relations. In this analysis, we present some noteworthy points that can help you understand the India-Israel dynamic better along with the points highlighted in the editorial section concerning the recent re-election of Israeli Prime Minister Benjamin Netanyahu.

Larger Background:

Historical Background:

- India formally recognised Israel on September 17, 1950. Soon thereafter, the Jewish Agency established an immigration office in Bombay. This was later converted into a Trade Office and subsequently into a Consulate. Embassies were opened in 1992 when full diplomatic relations were established. Since the upgradation of relations in 1992, defence and agriculture have been the main pillars of bilateral engagement. In recent years, ties have expanded to areas such as S&T, education and homeland security. The future vision of the cooperation is of a strong hi-tech partnership as befits two leading knowledge economies.

Indian Community in Israel:

- There are approximately 80,000 Jews of Indian-origin in Israel.
- Waves of immigration into Israel from India took place in the fifties and sixties.
- The majority is from Maharashtra (Bene Israelis) with relatively smaller numbers from Kerala (Cochini Jews) and Kolkata (Baghdadi Jews).
- In recent years some Indian Jews from North Eastern states of India (Bnei Menashe) have been immigrating to Israel. While the older generation still maintains an Indian lifestyle and their cultural links with India, the younger generation is increasingly assimilated into Israeli society.

A Look at the Recent Past:

- Traditionally India has aligned its decisions on UN Assembly and the bilateral ties with Israel based on a pro-Palestinian stance.
- **India has decided to “de-hyphenate” relations with Israel and Palestine.**
- This means that India will have its bilateral strategic ties with Israel irrespective of its political stance on Israel-Palestine issue.
- It is important to note that advocating the Israel-Palestine peace process is vital for India to restore its influence in West Asia.
- India's defence and security partnership with Israel has already proven useful to its security and military modernisation drive.
- **Recently, India and Israel have collaborated on a \$777 million project to develop a maritime version of the Barak-8 missile.**
- India has also reportedly agreed to purchase 54 HAROP attack drones for the Indian Air Force and two airborne warning and control systems (AWACS) worth over \$800 million from Israel.
- Due to its technological sophistication and warm relations, Israel has become one of India's top suppliers of military technology.
- India has benefited from Israeli expertise and technologies in horticulture mechanization, protected

cultivation, orchard and canopy management, nursery management, micro-irrigation and post-harvest management particularly in Haryana and Maharashtra. Israeli drip irrigation technologies and products are now widely used in India. Some Israeli companies and experts are providing expertise to manage and improve dairy farming in India through their expertise in high milk yield.

- It is important to note that Israel has become one of the foremost technology superpowers in areas such as rainwater harvesting, use of oceanic water and using that for irrigation in the most dry land.
- **Israel has transitioned from a water-deficit state to a water-surplus state, and has pioneered the water desalination technique**, something that's absolutely significant in the era of climate change, rapid loss of fresh water bodies, and rise in seawater levels.
- Israel achieved self-sufficiency in food production despite having 50% barren land.
- **Israel's 3.7% of workforce produces 97% of its own food.**
- Experts believe that India could well follow its path by using techniques from it like Drip Irrigation, Post-Harvest technology, Food Tissue culture, Plastic Culture, Vertical gardens, etc.
- Further, arid land technology, biotechnology and a joint action plan to research India specific and

export-oriented seeds deserve attention.

Israel has tackled its rain deficiency by developing technology solutions for waste water management, purification, desalination techniques and water reuse in agriculture and industry. The Israeli dairy industry with its proven know-how and design, technology and genetic material can revolutionize the dairy industry in India.

A Brief Note on the text of the Jewish Nation-State Law:

1. The State of Israel:
 1. Israel is the historic homeland of the Jewish people in which the State of Israel was established.
 2. The state of Israel is the nation-state of the Jewish people, in which it fulfills its natural, religious, and historic right to self-determination.
 3. The fulfilment of the right of national self-determination in the State of Israel is unique to the Jewish people.
2. National symbols of the State of Israel:
 1. The name of the state is Israel.
 2. The flag of the state is white, two blue stripes near the edges, and a blue Star of David in the center.
 3. The symbol of the state is the Menorah with seven branches, olive leaves on each side, and the word Israel at the bottom.
 4. The national anthem of the state is "Hatikvah"
 5. [Further] details concerning the issue of state symbols will be determined by law.
3. [The] unified and complete [city of] Jerusalem is the capital of Israel.
4. The Language of the State of Israel
 1. Hebrew is the language of the state.
 2. The Arabic language has a special status in the state; the regulation of the Arab language in state institutions or when facing them will be regulated by law.
 3. This clause does not change the status given to the Arabic language before the basic law was created.
5. The state will be open to Jewish immigration and to the gathering of the exiled.
6. The Diaspora:
 1. The state will labor to ensure the safety of sons of the Jewish people and its citizens who are in trouble and captivity due to their Jewishness or their citizenship.

2. The state will act to preserve the cultural, historical and religious legacy of the Jewish people among the Jewish diaspora.
 7. The state views Jewish settlement as a national value and will labor to encourage and promote its establishment and development.
 8. The Hebrew calendar is the official calendar of the state and alongside it the secular calendar will serve as an official calendar. The usage of the Hebrew calendar and of the secular calendar will be determined by law.
 9. National Holidays: a) Independence Day is the official holiday of the state.
 1. The Memorial Day for those who fell in the wars of Israel and the Memorial Day for the Holocaust and heroism are official memorial days of the state.
 10. Saturday and the Jewish Holidays are the official days of rest in the state. Those who are not Jewish have the right to honor their days of rest and their holidays. Details concerning these matters will be determined by law.
 11. This Basic Law may not be altered except by a Basic Law that gained the approval of the majority of the Knesset members.
- **In July 2018, the Knesset enacted a Basic Law declaring Israel the nation-state of the Jewish people. Jerusalem would be its indivisible capital and Hebrew its language.**
 - The right to self-determination within the state of Israel would by law be unique to the Jewish people.
 - This is a law that puts the status of Israel's 1.26 million Palestinian citizens and the estimated 5 million living in the West Bank and Gaza into a permanent limbo.
 - Some experts say that it marks the final fruition of an effort that began in 2007, when the U.S. resumed its token effort to broker a peace after all efforts at re-engineering the regional strategic architecture, beginning with the invasion of Iraq, had failed.

Editorial Analysis:

- Though tied on seats with his main rival, Mr. Netanyahu has a clear pathway towards power in coalition with a bloc of right-wing allies.
- As with earlier wins, eked out by strongly running against counsels of sanity from the diminishing peace camp, he has pulled the political centre of gravity sharply, yet again, to the ultra-right.

Sources of Prime Minister Benjamin Netanyahu's Support:

- There were a few notable triumphs achieved by Mr. Netanyahu that eventually facilitated his win. He counted on the unquestioning support of the Donald Trump administration in the U.S. and the reservoir of evangelical fervour from which it draws sustenance.
- Further, Mr. Netanyahu's opponents within Israel say that Mr. Trump effectively created a publicity video for him with a decree during the late days of the campaign, **recognising Israel's annexation of the Golan Heights**. This followed **Trump's gift on the 70th anniversary of Israel's formation last year, shifting the U.S. embassy from Tel Aviv to Jerusalem** and consigning the Arab third of the city's population to a future of indefinite occupation.
- It is also important to note that the comatose peace process, which was never more than a charade enabling the U.S. to keep its coalition of allies in the Arab world, was declared dead then. Even Mahmoud Abbas, the normally acquiescent Palestinian Authority President, has refused all offers to resume talks since.
- As a matter of fact, in the year 2007, when the U.S. resumed its token effort to broker a peace after all efforts at re-engineering the regional strategic architecture, beginning with the invasion of Iraq, had failed, Condoleezza Rice, the U.S. Secretary of State at the time, records her shock at the

precondition set by her Israeli counterpart Tzipi Livni, for returning to the talks. **Under no circumstances, Ms. Livni insisted, would a peace accord grant any concession to the right of Palestinian refugees to return to their homes, since that would be a mortal danger to Israel's Jewish character.**

- Rice took a while to get over the implications of what she heard: "Though I understood the argument intellectually, it struck me as a harsh defence of the ethnic purity of the Israeli state... [and] shocked my sensibilities as an American. After all, the very concept of 'American' rejects ethnic or religious definitions of citizenship. Moreover, there were Arab citizens of Israel. Where did they fit in?"
- The hesitancy was very brief since Ms. Rice quickly signed up for the project that had the endorsement of her right-wing fraternity in the U.S. After the George W. Bush administration vanished into history in 2008, Barack Obama sought to dissuade Israel from this insistence on ethnic purity.
- Trump, in his part-comical effort to be all that Mr. Obama was not, has waded on the project of Zionist purity. In tearing up the nuclear deal with Iran, Mr. Trump has also reversed other steps his predecessor took to create a new regional architecture of power through conciliation rather than coercion.

Mr. Netanyahu's strong campaign:

- Netanyahu's campaign rhetoric since his debut in politics was often called out for incitement against the Palestinians. He excelled himself this time, vowing in the last days of the campaign to never allow a Palestinian state and to annex parts of the West Bank.
- He is also on record telling Knesset colleagues that controlling the entire territory between the Jordan river and the Mediterranean is indispensable "for the foreseeable future". And he has been unapologetic about "living forever by the sword" if that be Israel's need.
- The people of Gaza have lived through this experience after the fraudulent Israeli withdrawal of 2005 which converted the densely populated strip into the world's largest open air prison. March 30 marked a year since the people of Gaza began their "great march of return", a mass mobilisation demanding the UN-mandated right of refugees to return home. No less than 70% of the 2 million people in Gaza are refugees from villages and towns razed to establish Israel.
- Israel responded to the Gaza mobilisation with brute force, killing nearly 300 people, including children and paramedics. After an inquiry, a UN Commission identified a pattern of violations of international humanitarian law, possibly amounting to war crimes, and urged individual sanctions against those responsible for Israel's actions in Gaza.

The view from India:

- India continues to be among the biggest overseas patrons of the Israeli military-industrial complex.
- Increasingly, in the public discourse, Israel is portrayed as the role model that a "new India" should emulate in terms of its security posture in a troubled neighbourhood.
- The cause of Palestinian freedom continues to gain token homage, but the myth that this commitment can be "de-hyphenated" from India's relations with Israel looks increasingly hollow.
- A renewal of India's commitment to Palestine should run concurrently with fighting back against the growing expressions of intolerance in political life and the shredding of the fabric of secular democracy.
- In conclusion, with Israel taking another perilous turn to the right, India's endorsement of the Boycott, Divestment and Sanctions movement, today the only option to gain justice for Palestine, seems a moral imperative.

2. What Umbrella Revolution convictions mean for status of Hong Kong

Note to the Students:

This article is taken from the “Explained” section of the Indian Express (13th April, 2019 edition).

Editorial Analysis:

- Under President Xi Jinping, who has been at the helm in China since 2012, the country has embraced a more hardline approach to foreign policy and internal security issues.
- Since the **Umbrella Revolution**, Chinese authorities have attempted to thwart democratic freedoms in Hong Kong.
- Nine pro-democracy activists were convicted in Hong Kong on 9th April, 2019, for participating in the Umbrella Revolution of 2014 when over one lakh Hong Kongers blocked roads in the city for three months to protest China’s denial of democratic reforms in the Special Administrative Region.
- Under President Xi Jinping, who has been at the helm in China since 2012, the country has embraced a more hardline approach to foreign policy and internal security issues.
- Since the Umbrella Revolution, Chinese authorities have attempted to thwart democratic freedoms in Hong Kong.

The Umbrella Revolution and its aftermath:

- **In 1997, when China assumed control of Hong Kong from Britain, the city residents were promised universal suffrage by 2017.**
- China backtracked on this promise when it published a white paper in 2014, and only allowed pro-Beijing candidates to contest the city elections. There were also attempts to change the liberal curriculum in Hong Kong.
- In the wake of these unpopular measures, large scale pro-democracy protests kicked off, and between 1-1.5 lakh Hong Kongers occupied streets and government buildings for three months in 2014.
- The pro-democracy activists expected Beijing to budge, as it had in 2003 when city residents had launched similar protests to protect their democratic freedoms. The economic reality then, however, was starkly different when Hong Kong formed a significant part China’s GDP (18 per cent in 1997). With China’s quick rise, this share has plummeted, now standing at less than 3 per cent.
- Xi Jinping’s approach is also considered to be more uncompromising than previous regimes.
- **In conclusion, China turned a deaf ear to the protests, and in fact unleashed more hardcore measures in their aftermath.**
- It is important to note that Beijing since then has ensured that only pro-mainland chief-executives (heads of government) take charge, and has also expelled legislators who have expressed discontent.
- **A pro-independence party was recently banned, and a reporter for the Financial Times was denied entry to Hong Kong.**
- Investment from mainland China has inundated the city, with pro-democracy artists being denied sponsorships and contracts. Publishers critical of the Chinese Communist Party have been abducted. **Furthermore, China plans to introduce an extradition law in Hong Kong, which would legitimise such abductions.**
- Hong Kong, which follows a liberal common law tradition, will be made to bend to arbitrary Chinese legal procedures.
- A National Anthem Law is already in force, which criminalises any insult to China’s national anthem.

- **Public radio broadcasts are now made in Mandarin, as opposed to Cantonese, the native language.**

Hong Kong: A Brief Look into History

- The island city of Hong Kong was a trading outpost that the British developed in the 19th century, at a time when the colonial power was subduing China in order to expand the global opium trade.
- The peninsula already being in British hands, the Qing dynasty in 1898 allowed the continuation of British possession on a 99-year lease, which would end in 1997.
- Since then, Hong Kong became a major trading center and continued to prosper, even as mainland China witnessed a highly tumultuous period in its history.
- **Starting in 1949, Communist China adopted a system that was in stark contrast with the liberal common law that was evolving in British-run Hong Kong.**
- The city nurtured liberal values, a thriving film industry, and a booming economy, while mainland China was witnessing the disastrous Cultural Revolution and the Great Leap Forward.
- Fearing backlash from its own citizens, mainland China pressured British authorities to desist from allowing democratic reforms in Hong Kong.
- For a long time, it was unclear under what conditions Britain would hand over the city to China in 1997, and the confusion finally ended **in 1984 when British PM Margaret Thatcher and Chinese leader Deng Xiaoping signed a 'Joint Declaration'**.
- Under this agreement, China promised to honour Hong Kong's liberal policies, system of governance, independent judiciary, and individual freedoms for a period of 50 years from 1997, and called for the formulation of the 'Basic Law', a constitutional document containing these promises, that Beijing would prepare. **The principle of "one country, two systems" was affirmed.**
- Although the Joint Declaration allayed some fears, anxiety remained among Hong Kong's diverse population of their fate come 1997.
- This consternation heightened **in 1989, when Beijing cracked down on the Tiananmen Square protests with great harshness**; also causing alarm globally.
- Further, Britain began to allow more representation in the city's governance, hoping to pacify a worried people. Although partial, the reforms accelerated towards 1997, and continued to expand even after the transfer to China.
- Post 2014, the pace of these reforms appears to have reached a dead end. A 2016 survey revealed that four in ten Hong Kongers want to leave the city.

Indians in the city: A Perspective

- Indians have been part of the diverse fabric that forms the city. Many arrived during the colonial period when India was also under British domination.
- These immigrants had British passports, and many won the right to settle in Britain in 1997. Around 45,000 still remain in the city, with some taking Chinese citizenship.

Category: SCIENCE AND TECHNOLOGY

1. Seeing darkness

What's in the news?

- On April 10, 2019, the Event Horizon Telescope (EHT) collaboration showed the world the 'unseeable': the very first image of a black hole.

What are Black Holes?

- Black holes are some of the strangest and most fascinating objects found in outer space.
- They are objects of extreme density, with such strong gravitational attraction that even light cannot escape from their grasp if it comes near enough.
- Albert Einstein first predicted black holes in 1916 with his general theory of relativity. The term "black hole" was coined in 1967 by American astronomer John Wheeler, and the first one was discovered in 1971.
- There are three types: stellar black holes, supermassive black holes and intermediate black holes.
- Scientists aren't certain how such large black holes spawn. Once they've formed, they gather mass from the dust and gas around them, material that is plentiful in the center of galaxies, allowing them to grow to enormous sizes.

Editorial Analysis:

- The black hole itself cannot be seen, because light cannot escape its intense gravitational attraction.
- The so-called **event horizon that envelops the black hole is the point of no return and any object transgressing this boundary is lost**. Just outside is a region where a photon (light quantum) can orbit the black hole without falling in. This is called the '**last photon ring**', and this is what the Event Horizon Telescope (EHT) imaged, seeing in effect the silhouette of a black hole.

A Brief Look at the Past:

- About a hundred years after the black hole made its way into physics through Albert Einstein's general theory of relativity, soon after the LIGO collaboration first directly observed the gravitational waves made by the merging of two black holes, the 'dark star' had finally been imaged.
- The Higgs boson was detected 50 years after it had been postulated, and gravitational waves were observed a century after Einstein predicted them.

Visual Proof of the Existence of Black Holes:

- Visual proof of the existence of black holes comes a century after they appeared in scientific literature.
- In a collaborative effort, eight telescopes around the world were used for the experiment. The challenges included making each observe the same broad range of wavelengths around 1.3 mm and having precise atomic clocks at each location, so the data could be combined.

Certain Specifics on Black Holes:

- A black hole marks the end of spacetime as commonly understood, and nothing that enters it can escape from the tremendous gravitational attraction.
- However, this is no real danger, as black holes are located at distances that humans do not have the power to scale.
- The Event Horizon Telescope (EHT) set out to image two candidate supermassive black holes — Sagittarius A*, which is 26,000 light years from the earth, at the centre of the Milky Way, and another which is 55 million light years away at the centre of the Messier 87 galaxy in the Virgo galaxy cluster. But the first image was of the more distant one.
- The very long baseline interferometry technique linked radio dishes of telescopes across the world

to produce a virtual telescope the size of the earth. This was needed to obtain the high resolution required for this measurement.

- Combining data from telescopes, each with different characteristics, was a separate challenge. Cutting-edge developments from computer science related to image recognition were used.
- As Katie Bouman, Assistant Professor at the California Institute of Technology, who led the efforts to develop an algorithm to put the data together and create the image, said in a TEDx talk, projects such as the Event Horizon Telescope (EHT) succeed owing to interdisciplinary expertise that people bring to the table.
- This experiment endorses the diversity of collaboration just as much as it does unrelenting patience and good faith in the power of science and reason.

Category: POLITY AND GOVERNANCE

1. Lateral entry — Here is what the government is trying to do

Note to the Students:

This article is taken from the “Explained” section of the Indian Express (13th April, 2019 edition).

What’s in the news?

- Almost a year after it invited applications to induct outside professionals into government departments, the Centre on 12th April, 2019, appointed nine non-governmental professionals in departments and ministries of financial services, economic affairs, agriculture, cooperation & farmers welfare, civil aviation, commerce, environment, forest and climate change, new and renewable energy, road transport and highways, and shipping.
- According to sources, the appointees are likely to join in the next two months.

Editorial Analysis:

- **The lateral entry mode, which pertains to the appointment of specialists from private sector in government organisations, is an attempt by the government to bring in fresh talent into the bureaucracy.**

A Look at some of the appointments made:

These joint-secretary level appointees, who will have an initial term of three years extendable up to five years, include Food and Agriculture Organization’s Kakoli Ghosh, who has been appointed at the Department of Agriculture, Cooperation and Farmers Welfare; consultancy KPMG’s partner and India head of aerospace and defence Amber Dubey, who will be joining the Ministry of Civil Aviation; former banker and SAARC Development Fund’s director – economic and infrastructure Rajeev Saxena who will join Department of Economic Affairs; Pune-based wind energy firm Panama Renewable Group’s CEO Dinesh Dayanand Jagdale who has been appointed at the Ministry of New and Renewable Energy; NHPC Ltd’s senior manager (environment) Sujit Kumar Bajpayee, who will join the Ministry of Environment, Forest and Climate Change.

- Other appointees include Arun Goel in the Department of Commerce, Saurabh Mishra in the Department of Financial Services, Suman Prasad Singh in the Ministry of Road Transport & Highways and Bhushan Kumar in the Ministry of Shipping.
- The government had also invited applications for a lateral entry into the Department of Revenue, however, UPSC said that recruitment process for the selection of candidate in the department

became “infructuous at the interview stage”.

- **It is pertinent to note that the process was being undertaken by the personnel ministry earlier and the responsibility to onboard the professionals was shifted to the Union Public Service Commission (UPSC).**
- Former government officials had pointed out at the time applications were invited that it needed to be seen who was doing the final selection of these candidates because the system could be “easily misused”.

F. Tidbits

1. 5G-linked cows show future of milking

- At the government-funded Agricultural Engineering Precision Innovation Centre (Agri-EPI Centre) in a town in England, around 50 of the 180-strong herd is fitted with the 5G smart collars and health-monitoring ear tags.
- The cows, among the 5G-connected gadgets have a collar that controls a robotic milking system.
- When the cow feels ready to be milked it will approach machine gates that will automatically open.
- The device recognises the individual to precisely latch on to its teats for milking, while the cow munches on a food reward.
- The gadgets do not harm the cows and the monitoring allows handlers to see any signs of distress.
- 5G is helping unleash the power that is there within the farm.

G. Prelims Facts

Nothing here for today!!!

H. Practice Questions for UPSC Prelims Exam

Q1) Consider the following statements:

1. The Rome Statute is a multilateral treaty that serves as the International Court of Justice -ICJ's governing document.
2. India has signed Rome Statute.

Which of the statement/s is/are correct?

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

Answer: d

Explanation:

The International Criminal Court is an intergovernmental organization and international tribunal that sits in Hague in the Netherlands. The ICC has the jurisdiction to prosecute individuals for the international crimes of genocide, crimes against humanity, war crimes, and crimes of aggression. The Rome Statute is a multilateral treaty which serves as the ICC's foundational and governing document. States which become party to the Rome Statute by ratifying it become member states of the ICC. India has not signed the Rome

Statute.

Q2) Consider the following statements:

1. In the aftermath of Jallianwala Bagh massacre, Gandhiji relinquished his title 'Kaiser-e-hind' bestowed on him by the British.
2. 'Kaiser-e-hind' title was bestowed upon by the British for Gandhiji's services during the Boer War in South Africa.

Which of the statement/s is/are correct?

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

Answer: c

Explanation:

On the day of the festival of Baisakhi on 13th April 1919 in Jallianwala Bagh, a public garden in Amritsar, a crowd of non-violent protestors had gathered. Also among the crowd were pilgrims who had come to celebrate Baisakhi. General Dyer came there with his troops and blocked the only narrow entrance to the garden. Then, without warning, he ordered his troops to fire at the unarmed crowd which included children as well. The indiscriminate firing went on for about 10 minutes which resulted in the deaths of at least 1000 people and injured more than 1500 people. This tragedy came as a rude shock to Indians and totally destroyed their faith in the British system of justice. In protest against the massacre and the British failure to give due justice to the victims, Rabindranath Tagore gave up his knighthood and Gandhiji relinquished his title 'Kaiser-e-hind' bestowed on him by the British for his services during the Boer War in South Africa.

Q3) Consider the following statements:

1. The International Court of Justice is the principal judicial organ of the United Nations.
2. The ICJ is the successor of the Permanent Court of International Justice (PCIJ)

Which of the statement/s is/are correct?

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

Answer: c

Explanation:

The International Court of Justice (ICJ) sometimes called the World Court, is the principal judicial organ of the United Nations. It settles legal disputes submitted by states and gives advisory opinions on legal issues referred by authorized U.N. organs and specialized agencies. Through its opinions and rulings, the ICJ also serves as a source of international law. The ICJ is the successor of the Permanent Court of International Justice (PCIJ), which was established by the League of Nations in 1920 and began its first session in 1922. After the Second World War, both the League and the PCIJ were dissolved and replaced by the United

Nations and ICJ, respectively.

Q4) Consider the following statements:

1. The Permanent Court of Arbitration is an intergovernmental organization located at The Hague in the Netherlands.
2. The Permanent Court of Arbitration is an agency of the United Nations.

Which of the statement/s is/are correct?

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

Answer: a

Explanation:

The Permanent Court of Arbitration (PCA) is an intergovernmental organization located at The Hague in the Netherlands. The PCA is not a court in the traditional sense but provides services of arbitral tribunal to resolve disputes that arise out of international agreements between member states, international organizations or private parties. The organization is not a United Nations agency, but the PCA is an official United Nations Observer.

I. UPSC Mains Practice Questions

1. Jallianwala Bagh massacre was one of the worst acts of violence in the history of the world. Comment. What was the main objective of General Dyer behind the Jallianwala Bagh massacre? (10 Marks)
2. BRI is not an avenue to promote common development to build global connectivity but a disguised neo-colonialist attempt at debt trap. Critically analyse. (15 Marks)

