

My Notes....

NATIONAL

ASSAM NRC FINAL LIST 2019

The final list of the updated National Register of Citizens (NRC) in Assam left out over 19 lakh people, almost half of the 40 lakh people excluded in the final draft published last year. Out of 3,30,27,661 applicants, a total of 3,11,21,004 persons were found eligible for inclusion in the final NRC. Taking into account all the persons already included and after disposal of all Claims and Objections and proceedings under Clause 4(3), it has been found that a total of 3, 11, 21,004 numbers of persons are found eligible for inclusion in Final NRC leaving out 19,06,657 numbers of persons including those who did not submit Claims, coordinator of the National Register of Citizens (NRC) said.

What

1. The process of receipt of NRC Application Forms started during the end of May 2015 and ended on August 31, 2015. A total of 3,30,27,661 members applied through 68,37,660 applications.
2. The particulars submitted by the applicants were taken up for scrutiny to determine the eligibility of their inclusion in NRC.
3. The entire process is conducted as per statutory provisions and due procedure followed at every stage.
4. Those excluded can approach a Foreigners Tribunal with a certified copy of the rejection order from the NRC, along with the grounds for appeal.
5. The Tribunal has to give its final order within 120 days from the date of production of records, the Home Ministry stated in an order dated May 30 this year.
6. In addition to the 100 Foreigners Tribunals, 200 more will be functional by September 1, state government officials said. If the applicant loses their case before such a Tribunal, he or she can appeal in the High Court, and then the Supreme Court if necessary.

Flashback

1. The NRC sets the cut-off date to be a legal Indian citizen as March 24, 1971 — a date formalised by the Assam Accord, which was signed by the All Assam Students Union, Assam government and Central government in 1985.
2. The NRC was first prepared in 1951, and the current exercise was an update. The final NRC includes names of people already in the 1951 NRC and their descendants.
3. It also includes those in any of the electoral rolls up to March 24, 1971, or in any one of other admissible documents issued up to that date, as well as the descendants of such people.
4. The preparation of the draft exclusion list of the NRC was approved by the SC under the Clause 5 of the Schedule of the Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003.
5. The FTs are quasi-judicial bodies meant to **“furnish opinion on the question of whether a person is or is not a foreigner within the meaning of **Foreigner’s Act, 1946**”**.

CWM INDEX 2.0

NITI Aayog has launched the second Round of Composite Water Management Index (CWMI 2.0) on 23 August 2019. CWMI 2.0 ranks various states for the reference year 2017-18 as against the base year 2016-17. In the report, Gujarat hold on to its

rank one in the reference year (2017-18), followed by Andhra Pradesh, Madhya Pradesh, Goa, Karnataka and Tamil Nadu.

What

1. In North Eastern and Himalayan States, Himachal Pradesh has been adjudged number 1 in 2017-18 followed by Uttarakhand, Tripura and Assam.
2. The Union Territories have first time submitted their data and Puducherry has been declared as the top ranker.

3. In terms of incremental change in index (over 2016-17 level), Haryana holds number one position in general States and Uttarakhand ranks at first position amongst North Eastern and Himalayan States.

4. On an average, 80% of the states assessed on the Index over the last three years have improved their water management scores, with an average improvement of +5.2 points.

5. Scientific management of water is increasingly recognized as

being vital to India's growth and ecosystem sustainability.

6. Government is being proactive about water management and has created the Ministry of Jal Shakti to consolidate interrelated functions pertaining to water management.
7. The newly formed Jal Shakti Ministry under the guidance of Prime Minister Shri Narendra Modi has strived to over bridge the water challenges by launching the Jal Shakti Abhiyan - a campaign for water conservation and water security.

Flashback

1. NITI Aayog first launched and conceptualized the Composite Water Management Index in 2018 as a tool to instill the sense of cooperative and competitive federalism among the states.
2. This was a first ever attempt at creating a pan-India set of metrics that measured different dimensions of water management and use across the lifecycle of water.
3. The report was widely acknowledged and provided actionable guidance to States on where they were doing well absolutely and relatively and what they needed to focus on to secure their water future.
4. The CWMI is an important tool to assess and improve the performance of States/ Union Territories in efficient management of water resources.
5. This has been done through a first of its kind water data collection exercise in partnership with Ministry of Jal Shakti, Ministry of Rural Development and all the States/ Union Territories.
6. The index would provide useful information for the States and also for the concerned Central Ministries/Departments enabling them to formulate and implement suitable strategies for better management of water resources.

GULBARGA TUR DAL GETS GI TAG

The '**Gulbarga tur dal**' (Kalaburagi red gram) has received Geographical Indication (GI) tag from the government. The application was filed by the University of Agriculture Sciences (UAS) Raichur and the Karnataka Red Gram Development Board, with the help of ICRISAT, Intellectual Property Facilitation Centre (IPFC) Hyderabad with Geographical Indications (GI) Registry, in September 2017.

What

1. High calcium and potassium content of the soil in Gulbarga tur dal-growing region has been one of the major factors for its superior quality.

2. According to soil test reports Kalaburagi soil contains 3.6 g/100g calcium and 0.1 g/100g potassium. Whereas the soil sample in Bengaluru contains 0.135 g/100g calcium and 0.045g/100g potassium.
3. The other test parameters include volume, grain weight after cooking, leachable solid per cent, texture, appearance, colour, flavour, taste, and smell. The tur dal here has a good taste and aroma compared to that grown elsewhere. It also takes less time to cook.
4. The Agriculture Department and the **farmers' forum, should** organise awareness programmes across the district to make farmers aware of the benefits of the GI tag, the GI tag helps red gram growers get a premium price. Besides minimum support price, the farmers growing tur dal of GI standard can increase the price by 10%.
5. Red gram is the main kharif crop in the Hyderabad Karnataka region. Of the total 9 lakh hectares of red gram cultivated across the State, around 3.7 lakh hectares of the crop is grown in Kalaburagi district alone.

Flashback

1. A geographical indication (GI) is a name or sign used on certain products which corresponds to a specific geographical location or origin (e.g. a town, region, or country).
2. India, as a member of the World Trade Organization (WTO), enacted the Geographical Indications of Goods (Registration and Protection) Act, 1999 has come into force with effect from 15 September 2003.
3. GIs have been defined under Article 22(1) of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement as: "Indications which identify a good as originating in the territory of a member, or a region or a locality in that territory, where a given quality, reputation or characteristic of the good is essentially attributable to its geographic origin".
4. The GI tag ensures that none other than those registered as authorised users (or at least those residing inside the geographic territory) are allowed to use the popular product name.
5. Darjeeling tea became the first GI tagged product in India in 2004-05.

REPEAL OF ARTICLES 104, 193

Lok Sabha Speaker Om Birla said he would soon approach the Union government and make a request for bringing a Constitutional (amendment) Bill in the Parliament to repeal Article 104 and Article 193 of the Indian Constitution which has now become irrelevant. Both the Articles are related to a penalty of Rs 500 each day if any unauthorized person sits or votes in the either house of the Parliament or state legislatures.

What

1. Birla gave this assurance at a meeting of speakers of all states in New Delhi on 28 August 2019 after being agreed with a proposal of Bihar assembly speaker Vijay Kumar Choudhary.
2. The meeting of state speakers, held at the Annexe Building of the Parliament in New Delhi, was presided over by Birla.
3. In the meeting, Bihar speaker Choudhary moved a proposal for repealing the Article 104 and Article 193 of the Constitution.
4. In favour of his proposal, Choudhary argued that the provisions of a penalty of Rs 500 per day to a person if he or she, in an un-authorised manner, enters either houses of the Parliament or the state legislature and cast his/ her votes in the legislative bodies, **have today become completely "irrelevant and unnecessary."**

5. Such situation will not arise in any house these days because of adequate security arrangements around the legislative houses during the sessions. Even if such situation arises, the illegal trespasser in the house can be dealt under the provisions of the Indian Penal code.
6. In his another proposal, Choudhary urged Birla to make necessary arrangements for implementation of the National e-Vidhan Application (NeVA) project in all state assemblies through the Lok Sabha secretariat.
7. The Lok Sabha speaker that the NeVA project was currently being implemented **through the Union ministry of parliamentary affairs, but the “progress made in the project is not very encouraging.”**
8. The issue of computerization of the offices of the Bihar Vidhan Sabha is pending before union government since February, 2016, Choudhary informed Birla and urged him to look into the matter.

NSIL BEGINS SEARCH FOR PSLV MAKERS

NewSpace India Ltd, the new public sector space business company, launched a formal search for industry consortia which can regularly manufacture and deliver entire PSLV satellite launch vehicles for its parent, the Indian Space Research Organisation. It will initially outsource five PSLVs — Indian rockets that can lift light **payloads to ‘low earth orbits’ some 600 km in space. NSIL has called a pre-bid meeting of potential parties on August 26. The four-stage PSLV is needed to place both Indian remote sensing satellites and small satellites of foreign customers to space.**

What

1. NSIL was formed in March this year to promote Indian space commerce.
2. In its first tender it invited expressions of interest or EoIs from one or more experienced companies or consortia to produce the launchers end to end: their job starts from component procuring, electronics , to large stages and finally the assembly, integration and testing (AIT) of the vehicles. Selected parties can use ISRO facilities where required.
3. In the August 16 **document titled ‘EoI for PSLV production by Indian industry consortium’, NSIL said, “With a target of producing 12 PSLVs per annum through Indian industry, NSIL/ISRO, as a first step, is looking forward to 5 PSLVs,” through selected companies or consortia.**
4. Upon successful and satisfactory completion of realisation of 5 PSLVs, NSIL/ISRO will enhance the scope to 12 PSLVs per annum under a separate contract.

About NSIL

1. NewSpace India Limited (NSIL), the commercial arm of Indian Space Research Organisation (Isro), was officially inaugurated in Bengaluru on 26 May 2019.
2. NSIL's main objective is to scale up industry participation in Indian space programmes. NSIL was inaugurated by Isro's honorary adviser, Dr K Kasturirangan in the presence of chairman Dr K Sivan.
3. NSIL was incorporated on March 6 2019, for commercially utilising research and development activities carried out by ISRO in the area of space with an authorised share capital of Rs 100 crore and initial paid up capital of Rs 10 crore.
4. NSIL will act as an aggregator for all space related activities in industry and develop private entrepreneurship in space related technologies.
5. Specifically, it will be responsible for manufacturing and production of Small Satellite Launch Vehicle (SSLV) and Polar Satellite Launch Vehicle (PSLV) through technology transfer mechanisms.

5. On the satellite side, groups of industries are already helping ISRO in AIT at the Bengaluru-based U.R. Rao Satellite Centre and have produced a couple of mid-sized satellites.
6. ISRO also has two increasingly more powerful launchers in that order — the GSLV and the GSLV-Mk III, used to lift 2,000 kg and 4,000 kg communication satellites to higher orbits.

INTERNATIONAL

WHAT IS THE UN'S STAND ON KASHMIR?

On August 16, the United Nations Security Council (UNSC) held a “closed consultation” meeting on the situation in Kashmir. On August 5, India had ended the special status of the State of Jammu and Kashmir (J&K) under Article 370 and Article 35A, carving it into two Union Territories: J&K and Ladakh. India and Pakistan were kept out of the UNSC meeting on 16 August 2019. The **last time ‘The India-Pakistan Question’ was taken up by the UNSC was in December 1971** when India and Pakistan fought a war leading to the creation of Bangladesh. It had been discussed during the 1965 war too when Indian and Pakistani forces clashed in Kashmir and the western borders. After the abrogation of Article 370, Pakistan wrote to the UNSC. China, a permanent member of the UNSC, and an ally of Pakistan, sought a meeting of the UNSC to discuss the developments in Kashmir.

When did the UNSC first discuss J&K?

1. The Kashmir issue at the UN debuted on January 1, 1948 as India urged the UNSC to discuss the conflict that had erupted three months earlier when Pakistan sent irregulars, tribals and camouflaged soldiers into Kashmir prompting the Maharaja of the princely Indian State to accede to India.
2. The submission of India detailing the violence unleashed by the irregulars on the local population and infrastructure became the foundation upon **which the “Jammu and Kashmir Question” was created at the UNSC.**
3. The title was changed on January 22, 1948 to **“The India-Pakistan Question”**. **From its origin till 1971, the topic featured prominently at the UNSC especially when both countries clashed.**
4. Under Resolution 39 on January 20, 1948, the UNSC set up a three-member UN Commission for India and Pakistan (UNCIP).

Simla Agreement and Kashmir issue

1. Under the Simla Agreement of July 2, 1972, India **gained Pakistan’s commitment that the Kashmir conflict would be resolved bilaterally.**
2. Pakistan, however, kept the issue alive by hosting the Islamic Summit of 1974 where Pakistan began courting the Islamic world for its major foreign policy goals.
3. After the Simla Agreement, Pakistan proceeded to further entrench territorial status quo as Prime Minister Zulfikar Ali Bhutto on November 7, 1973 ruled out an independent status for Azad Kashmir.
4. The Northern Areas and Azad Kashmir were territories of the princely Indian State of Jammu and Kashmir that were awaiting plebiscite but the **case for “accession” ruined the chance of Pakistan acting in accordance with the conditions of plebiscite, writes Aman M. Hingorani in Unravelling the Kashmir Knot.**
5. Under these circumstances, Kashmir as a legal problem appears far more daunting than Kashmir as a political problem that can be addressed by two powers of South Asia.

5. Disagreement between India and Pakistan led to the first failure as the commission failed to materialise.
6. The commission was finally reconstituted with five members on April 21, 1948 and it was mandated to plan a mechanism to ensure a plebiscite in the State. (This was part of the UNSC Resolution 47).
7. The UNSC Resolution 47 passed on this date urged India and Pakistan to hold a plebiscite after restoration of law and order. The UNCIP passed a resolution on **January 5, 1949 that provided the mechanism for holding a “free and impartial plebiscite” in Kashmir.**
8. At this juncture Pakistan managed to get an upper hand as the UNSC, under the influence of the United Kingdom, agreed to a ceasefire proposal without first ensuring **Pakistan’s withdrawal from the area that it had gained during the early tribal raid in Kashmir.**
9. This allowed Pakistan to hold on to territory that would ultimately contribute to undermining the terms of the plebiscite itself.

AMAZON FOREST FIRES

As the Amazon forest fires rage on, US space agency NASA said that 2019 has seen an increase in the number forest fires in the Amazon region in Brazil. **NASA’s** data also showed that the fires have led to an increase in the carbon monoxide levels in the atmosphere. NASA satellites which have been tracking the fire activity confirmed that there has been an increase in the number and intensity of fires in the Brazilian Amazon rainforest in 2019. NASA has called 2019 as the active fire year in the region since 2010.

What

1. August 2019 stands out because it has brought a noticeable increase in large, intense, and persistent fires burning along major roads in the central Brazilian Amazon.
2. According to NASA, while drought plays a role in making the Amazon forest fires worse, the timing and location of fires, which are taking place early in the 2019 dry season are more in line with land clearing techniques, than just drought.
3. **NASA’s primary tool** for fire detections is the Moderate Resolution Imaging Spectroradiometer (MODIS) instruments on the Terra and Aqua satellites.
4. According to NASA, the state of Amazonas is on track for record fire activity in 2019, which is not reassuring news, since the Amazon forest is considered to be the lungs of the world and **provides nearly 20 per cent of the Earth’s oxygen.**
5. Data from **NASA’s Atmospheric Infrared Sounder** or AIRS instrument, which is on the Aqua satellite, also showed that movement of carbon monoxide in the higher levels of the atmosphere due to these forest fires.
6. According to NASA, carbon monoxide at an altitude of 18,000 feet (5,500 meters) from August 8-22, 2019 shows the plume is growing in the northwest Amazon region.
7. The increasing levels of carbon monoxide in the air are worrying because as NASA points out this pollutant gas can travel large distances, and persist in the atmosphere for about a month.
8. While carbon monoxide at high altitude does not impact the air we breathe, but strong winds can carry it downward to where it can significantly impact air quality.

INDIA IN G-7 SUMMIT

Prime Minister Narendra Modi highlighted **India’s efforts towards eliminating** single-use plastic, conserving water, harnessing solar energy and, protecting flora and

fauna for a sustainable future during his address at the G-7 session on environment in Biarritz. **Reiterating India's commitment to tackle global challenges** Prime Minister Narendra Modi attended the dedicated session of **G7 Biarritz summit on 'Biodiversity, Oceans, Climate'**. **Underlined India's contribution** to address the reducing biodiversity, climate change, Water stress and ocean pollution.

What

1. The development comes just days after Indian announced that by next year it would draw up a plan to reduce its **greenhouse gas emissions in the "long-term"**.
2. The announcement was made during a joint statement by India-France following the meeting between Modi and French President Emmanuel Macron in Paris.
3. A similar commitment was reflected from the French side as well. Currently, as part of the global effort to fight climate change, India has set a few targets for itself for the year 2030.
4. Most other countries also have targets for the year 2025 or 2030. Under the 2015 Paris Agreement, countries need to make their next set of commitments, for the period beyond 2030, only by 2025.
5. Earlier during his address to the Indian community at the UNESCO headquarters in Paris, Modi said that India would achieve most of the COP 21 climate change goals set for 2030 in the next one and half years.
6. As part of its contribution in the global fight against climate change, India has made three main promises — that it will reduce its emission intensity, or emission per unit of GDP, by 33 to 35 per cent by 2030 compared to 2005 levels, that it will ensure that at least 40 per cent of its electricity in 2030 will come from non-fossil fuel sources and that it will create 2.5 to 3 billion tonnes of additional carbon sink through forests.
7. India had ratified the Paris agreement on climate change in 2016 to become the 62nd nation to join the deal.

RUPAY CARD IN UAE

RuPay card was officially launched in the UAE on 24 August 2019 at the Emirates Palace Abu Dhabi **in presence of PM Narendra Modi in what would further assist India's** business interests and diaspora in the resource rich Gulf region. UAE is the first country in the Gulf where Indian RuPay card has been launched. Modi swiped his Rupay card for buying Indian sweets. The PM is visiting UAE between his bilateral summit in Paris and G-7 Summit in Biarritz.

What

1. UAE receives close to 3 million Indian tourists annually. Acceptance of Rupay card in UAE will lower the charges as tourists will save on exchange rate.
2. National Payment Corporation of India (NPCI) is association with Mercury

Flashback

1. RuPay card scheme was launched in 2012 to fulfil **the Reserve Bank of India's vision to have a domestic, open and multilateral system of payments.**
2. RuPay facilitates electronic payment at all Indian banks and financial institutions.
3. India has already launched the RuPay card in Singapore and Bhutan.
4. RuPay is a product of NPCI, the umbrella organisation that powers retail payments in the country. The provision under the Payment and Settlement Systems Act, 2007, empowered the Reserve Bank of India (RBI) and **Indian Banks' Association (IBA)** to create a secure electronic payment and settlement system in India.

Payments Services - **UAE's Domestic Scheme has made RuPay Cards acceptable** at 175,000 merchant acceptance locations and 5,000 ATM and cash access locations within UAE.

3. Today, there are close to 500 million RuPay cards in circulation in India. RuPay has also tied-up with international players like Discover, Japan Credit Bureau and China Union Pay to enhance its international acceptance and recently achieved a milestone of issuing 25 million RuPay – Discover global cards.
4. NPCI, which manages the RuPay card network in the country issues RuPay Global cards that run on the Discover Network when used outside India.
5. The acceptance of RuPay Global cards with the partnership of Discover has reached over 44 million plus merchants & 2 million ATM and cash access locations, across 190 countries and is constantly growing.

ECONOMY

RECOMMENDATIONS OF JALAN COMMITTEE ACCEPTED

The RBI board accepted the recommendations of the Bimal Jalan committee and has decided to transfer Rs 1,76,051 crore to the government. This is broken as Rs 1,23,414 crore as surplus for year 2018-19 and another Rs 52,637 crore of excess provisions identified by the committee as per the revised Economic Capital Framework (ECF). Out of this total sum, an amount of Rs 28,000 crore has already been paid as interim dividend and already been accounted by the budget in the previous financial year. The difference in accounting is owing to the Reserve Bank of India (RBI) not following the conventional financial year of April-March thus far.

What is the size of RBI's balance sheet?

1. In 2017-**18, the size of RBI's balance sheet was Rs 36.2 lakh crore**. Its balance sheet, however, is unlike that of a company.
2. The currency notes it prints make up more than half its liabilities. Another big share, 26%, represents its reserves.
3. These are invested mainly in foreign and Indian government securities (essentially promissory notes bearing an interest rate against which these governments borrow) and gold.
4. The RBI holds a little over 566 tons of gold, which along with its forex assets make up almost 77% of its assets. Sometimes, the finance ministry and the RBI disagree on what level of reserves the RBI must hold to be consistent with its operations.

Where do the reserves come from?

1. The central bank has three different funds that together comprise its reserves. These are the Currency and Gold Revaluation Account (CGRA), the Contingency Fund (CF) and the Asset Development Fund (ADF).
2. Of these, the CGRA is by far the largest and makes up the significant bulk of the **RBI's reserves**. The fund, which in essence is made up of the gains on the revaluation of foreign exchange and gold, stood at ₹6.91 lakh crore as of financial year 2017-18.
3. The CGRA has grown quite significantly since 2010, at a compounded annual growth rate of 25%.
4. The CF is the second biggest fund, amounting to ₹2.32 lakh crore in 2017-18. It is designed to meet contingencies from exchange rate operations and monetary policy **decisions and is funded in large part from the RBI's profits**. The ADF makes up a much smaller share of the reserves.

What is the RBI's surplus?

1. This represents the amount RBI transfers to the government. There are two unique **features about RBI's financial statements**.
2. It is not required to pay income tax and has to transfer to the government the surplus left over after meeting its needs.
3. **RBI's income comes mainly through interest on the securities** it holds and in 2017-18 the largest component of expenditure was a provision of about Rs 14,200 crore it made to the contingency fund.
4. Obviously, the larger the provision made to CF, the lower the surplus. Beginning 2013-14, **RBI didn't make a provision to CF** for three successive years as a technical committee felt its "buffers" were more than enough.
5. In the last two years, however, RBI has made provisions to CF. The adequacy of the current level of CF is one of the key issues likely to be debated extensively by the expert committee.

How much should the RBI keep?

1. This has been a contentious issue. The RBI and the Finance Ministry have been at loggerheads over how much should be transferred to the Centre.
2. The government countered that the RBI had reserves far in excess of what the global norms were and, so, should transfer the excess.
3. Finally, the government in November 2018 set up a committee under former RBI Governor Bimal Jalan to look into the issue. That committee submitted its report, and the recent transfers have been made on the basis of its recommendations.

What did the Jalan Committee recommend?

1. The Jalan Committee is actually called the Expert Committee to Review the RBI's Extant Economic Capital Framework.
2. The committee recommended that the RBI maintain a Contingent Risk Buffer — which mostly comes from the CF — of between 5.5-6.5% of the central bank's balance sheet.
3. **Since the latest CF amount was about 6.8% of the RBI's balance sheet, the excess amount was to be transferred to the government.**
4. The committee also decided, for the year under consideration, to use the lower limit of 5.5% of the range it recommended. So, basically, whatever was excess of **5.5% of the RBI's assets in the CF** was to be transferred. That amount was ₹52,637 crore.
5. Regarding the RBI's **economic capital levels** — which is essentially the CGRA — the committee recommended keeping them in the range of 20-24.5% of the balance sheet.
6. Since it stood at 23.3% as of June 2019, the committee felt that there was no need to add more to it, and so the full net income of the RBI — a whopping ₹1,23,414 crore — should be transferred to the Centre.
7. That ₹1.23 lakh crore plus the ₹52,637 crore is what comprises the ₹1.76 lakh crore that the RBI has decided to transfer to the government. It must be noted that this

Flashback

1. In the past, the issue of the ideal size of RBI's reserves was examined by three committees -- V Subrahmanyam (1997), Usha Thorat (2004) and Y H Malegam (2013). The Subrahmanyam committee recommended that contingency reserve should be built up to 12 per cent.
2. The Thorat committee said the reserve adequacy should be maintained at 18 per cent of the total assets. The RBI board did not accept the recommendation of the Thorat committee and decided to continue with the recommendation of the Subrahmanyam panel.

₹1.76 lakh crore includes the ₹28,000 crore interim dividend earlier transferred to the Centre and does not come over and above it.

BIG BANKS MERGER

Finance Minister Nirmala Sitharaman on 30 August 2019 announced measures for the banking sector. Sitharaman said the government is trying to create big next generation banks. She said that government has decided to merge Punjab National Bank, Oriental Bank of Commerce and United Bank; Canara Bank and Syndicate Banks; Union Bank of India, Andhra Bank and Corporation Bank; and Indian Bank and Allahabad Bank. Last week, the Finance Minister had announced a slew of measures to revive economic growth from a five-year low. She had announced rollback of super-rich tax on foreign and domestic equity investors, exemption of startups from 'angel tax', a package to address distress in the auto sector and upfront infusion of Rs 70,000 crore into public sector banks, in an effort to boost growth.

What

1. After the amalgamation, only 12 PSBs will be left in India from the 27 earlier. Consequent to the merger, Punjab National Bank will become the second largest PSB in India with a total business of Rs 17.5 lakh crore.
2. Additionally, the total business of the merged entity of Canara Bank and Syndicate Bank will be Rs 15.20 lakh crore. It will become the fourth largest PSB in the country.
3. Consolidated Indian & Allahabad Banks to be 7th largest PSB with Rs 8.08 lakh crore business. Strong scale benefits to both with business doubling. High CASA & lending capacity combined in consolidated bank.
4. Consolidated Union+Andhra+Corporation Banks to be 5th largest PSB with Rs 14.6L Cr. business & 4th largest branch network in India. Strong scale benefits to all 3 with biz becoming 2 to 4½ times that of individual bank.

Key announcements:

1. PNB, OBC and United Bank to be merged. Canara and Syndicate Bank will also be merged.
2. Merger of Union Bank of India, Andhra Bank and Corporation Bank will be merger.
3. Indian Bank and Allahabad Bank merged.
4. Government's intention not just to give capital but also give good governance.
5. There is no government interference in commercial decisions of banks.
6. Gross NPA level has come down heavily.
7. Govt monitoring large loans to avert frauds.
8. Sanctioning and monitoring of loans are separated.
9. Special agencies formed to monitor loans above Rs 250 crore to avoid a Nirav Modi like situation.
10. Eight public sector banks have launched repo-rate linked loans in the last one week.
11. Four NBFC have already found liquidity solution through a settlement with banks.
12. Govt taking steps to make a clear path to achieve a target of \$5 trillion economy.

A PANEL SETS UP TO EXAMINE BANK FRAUD

The Central Vigilance Commission (CVC) has constituted Advisory Board for Banking Frauds (ABBF) headed by former Vigilance Commissioner T M Bhasin to examine bank fraud over Rs 50 crore and recommend action. The panel in its previous avatar called the Advisory Board on Bank, Commercial and Financial Frauds. The ABBF, formed in consultation with the RBI, would function as the first level of examination of

all large fraud cases before recommendations or references are made to the investigative agencies by the respective public sector banks (PSBs), CVC said in an order.

What

1. The four-member board's jurisdiction would be confined to those cases involving the level of officers of General Manager and above in the PSB in respect of an allegation of a fraud in a borrowal account.
2. Lenders would refer all large fraud cases above Rs 50 crore to the board and on receipt of its recommendation or advice, the bank concerned would take further action in such matter.
3. Central Bureau of Investigation (CBI) may also refer any case or matter to the board where it has any issue or difficulty or in technical matters with the PSB concerned.
4. Other members of the panel are Madhusudan Prasad - former Urban Development Secretary, D K Pathak - former Director General of the Border Security Force and Suresh N Patel - former MD and CEO of Andhra Bank.
5. The tenure of the Chairman and members would be for a period of two years from August 21, 2019.
6. It further said the board will also periodically carry out frauds analysis in the financial system and give inputs for policy formulation related to the fraud to the RBI.
7. Headquartered in Delhi, the Reserve Bank of India will provide required secretarial services, logistic and analytical support along with the necessary funding to the board.
8. In a bid to check such incidences, the government has already issued the 'framework for timely detection, reporting, and investigation relating to large-value bank frauds' to PSBs, which makes it clear that all accounts exceeding Rs 50 crore, if classified as an NPA, should be examined by banks from the angle of possible fraud, and a report be placed before the bank's Committee for Review of NPAs based on the findings of the investigation.

Flashback

1. The Central Vigilance Commission was set up by the Government in February 1964 on the recommendations of the Committee on Prevention of Corruption headed by Shri K. Santhanam to advise and guide Central Government agencies in the field of vigilance.
2. CVC are conceived to be the apex vigilance institution, free of control from any executive authority, monitoring all vigilance activity under the Central Government and advising various authorities in Central Government organizations in planning, executing, reviewing and reforming their vigilant work.
3. Consequent upon promulgation of an Ordinance by the President, the Central Vigilance Commission has been made a multi member Commission with "statutory status" with effect from 25th August, 1998.
4. The CVC Bill was passed by both the houses of Parliament in 2003 and the President gave its assent on September 11, 2003. Thus the Central Vigilance Commission Act 2003 came into effect from that date.
5. The Commission shall consist of: A Central Vigilance Commissioner - Chairperson and Not more than two Vigilance Commissioners - Members.

9. Besides, the PSBs have been advised to obtain a certified copy of the passport of promoters/directors and other authorised signatories of companies taking loan facilities of more than Rs 50 crore.

SCIENCE AND TECHNOLOGY

OCEAN ENERGY NOW A RENEWABLE SOURCE

Ocean energy has been included in renewable energy to give a further boost to ocean energy in India. Power Minister R K Singh approved the proposal. It has been clarified by the Ministry of New and Renewable Energy to all the stakeholders that energy produced using various forms of ocean energy such as tidal, wave, ocean thermal energy conversion, etc. shall be considered as renewable energy and shall be eligible for meeting the non-solar Renewable Purchase Obligations (RPO).

What

1. The total identified potential of tidal energy is about 12,455 MW, whereas the **total theoretical potential of wave energy in India along the country's coast** is estimated to be about 40,000 MW.
2. Ocean Thermal Energy Conversion (OTEC) has a theoretical potential of 180,000 MW in India if suitable technological support is provided.
3. In another move towards boosting renewable energy, the government has decided to relax the condition of mandatory charging of lease rent of Rs. 30,000 per MW for wind power projects.
4. The government envisages to meet maximum energy requirement by tapping renewal energy resources and, to achieve the target of clean energy in a time-bound manner, various policies and regulations are being constantly updated. The move is aimed to boost investment in wind power projects and to help in providing wind power at a cheaper rate.
5. At present, wind power project establishment needed additional mandatory charges compensatory afforestation and Net Present Value (NPV).
6. In addition to mandatory charges, the wind power companies had to pay additional lease rent of 30,000 per MW, which the government has now decided to ease. As a matter of fact, this mandatory additional cost is not applicable to other renewable energy projects such as solar power and hydel electric projects.
7. The additional cost of power generation increases the per-unit cost to the consumers. Further, the government underlined that currently India has overachieved the target and is well on track to ensure that more than 50% of the installed capacity comes from renewable sources by 2030.

What Is a Renewable Resource?

1. A renewable resource is a substance of economic value that can be replaced or replenished in the same or less amount of time than it takes to draw the supply down.
2. Some renewable resources have, essentially, an endless supply such as solar energy, wind energy, and geothermal pressure, whereas other resources are considered renewable even though some time or effort must go into their renewal (e.g., wood, oxygen, leather, and fish).
3. Most precious metals are renewable also. Although precious metals are not naturally replaced, they can be recycled because they are not destroyed during their extraction and use.

LARGEST SO₂ EMITTER IN WORLD

India is the world's largest emitter of anthropogenic sulphur dioxide, which is produced from coal burning, and greatly contributes to air pollution, a study claimed on August 19. According to an analysis of a National Aeronautics and Space Administration (NASA) data released by environmental NGO Greenpeace on August 19, India has more than 15% of all anthropogenic sulphur dioxide (SO₂) hotspots in the world detected by the OMI (Ozone Monitoring Instrument) satellite.

What

1. The major SO₂ emission hotspots in India are Singrauli in Madhya Pradesh, Neyveli and Chennai in Tamil Nadu, Talcher and Jharsuguda in Odisha, Korba in Chhattisgarh, Kutch in Gujarat, Ramagundam in Telangana and Chandrapur and Koradi in Maharashtra.
2. The vast majority of plants in India lack flue-gas desulfurization technology to reduce their air pollution.
3. The NASA data also highlights other hotspots across the globe, with the Norilsk smelter complex in Russia being the largest SO₂ emission hotspot in the world, followed by Kriel in Mpumalanga province in South Africa and Zagroz in Iran.
4. However, as per country-wise world rankings, India was found at the top position in emitting SO₂ as it has the maximum hotspots.
5. Environment experts called for strict action on coal power plants. They said these plants should not be given a free hand to continue polluting and causing a health emergency situation in the country.
6. The report said SO₂ emissions are a significant contributor to air pollution. The largest source of SO₂ in the atmosphere is the burning of fossil fuels in power plants and other industrial facilities.

Flashback

1. In December 2015, the Ministry of Environment, Forest and Climate Change had introduced for the first time SO₂ emission limits for coal power plants with an initial deadline to retrofit technology to control SO₂ emissions from power generation by December 2017.
2. At the request of the Ministry of Power and power plant operators, this was later extended till December 2019 for power plants in Delhi-NCR and till 2022 for some other power plants across the country through a Supreme Court order.
3. According to the analysis, air pollution is a huge public health concern, with **91 per cent of the world's population living in** areas where outdoor air pollution exceeds guideline limits by the World Health Organization (WHO) and as a result, 4.2 million people die prematurely every year.

EUROPA CLIPPER MISSION

NASA has confirmed the next phase of development of the Europa Clipper mission – an **interplanetary mission to Jupiter's smallest** moon Europa. The US space agency has cleared the mission to progress through its final design phase, followed by the construction and testing of the entire spacecraft. The latest development comes over 2 years after NASA originally announced its plans for the Galilean moon. To recall, NASA had announced the Europa Clipper mission back in March 2017.

What

1. The mission will be conducting an **in-depth exploration of Jupiter's moon** Europa and investigate whether the icy moon can have suitable conditions for sustaining life and increase our insights in to astrobiology.

2. NASA targets to have the Europa Clipper spacecraft ready for launch early by 2023. The space agency had earlier committed a launch date by 2025.
3. **The space agency's Jet Propulsion Laboratory in Pasadena, California** leads the development of the Europa Clipper mission in partnership with the Johns Hopkins University Applied Physics Laboratory for the Science Mission Directorate. The mission is managed by the Planetary Missions Program Office at **NASA's Marshall Space Flight Center** in Huntsville, Alabama.
4. **Jupiter's Galilean moon Europa consists of a huge ocean of liquid water beneath** its icy shell. The water is in contact with the rocky core of the moon, which according to space scientists, make a range of interesting chemical reactions possible.
5. Hence astrobiologists consider 1,940-miles-wide (3,120 kilometres) Europa moon to be one of the best bets to host alien life in the solar system.
6. This apart, NASA had recently shared new pictures of Jupiter, which were taken by the **Hubble's Wide Field Camera 3** when the planet was 400 million miles from Earth on June 27, 2019.
7. Earlier this month, Jupiter was possibly hit by an asteroid and the impact was captured by astronomer Ethan Chappel, who captured the event using his Celestron 8 telescope before it faded away.

FIRST HUMANOID ROBOT IN SPACE

Russia on 22 August 2019 launched an unmanned rocket carrying a life-size humanoid robot that will spend 10 days learning to assist astronauts on the International Space Station. Named Fedor, short for Final Experimental Demonstration Object Research, the robot is the first ever sent up by Russia. Fedor blasted off in a Soyuz MS-14 spacecraft from Russia's Baikonur cosmodrome in Kazakhstan. The Soyuz is set to dock with the space station and stay till September 7.

What

1. Soyuz ships are normally manned on such trips, but no humans are travelling in order to test a new emergency rescue system.
2. Instead of cosmonauts, Fedor, also known as Skybot F850, was strapped into a specially adapted pilot's seat, with a small Russian flag in hand.
3. The silvery anthropomorphic robot stands 1.80 metres (5 foot 11 inches) tall and weighs 160 kilogrammes (353 pounds).

Flashback

1. The International Space Station (ISS) is a space station (habitable artificial satellite) in low Earth orbit.
2. The ISS programme is a joint project between five participating space agencies: NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada).
3. The ownership and use of the space station is established by intergovernmental treaties and agreements.
4. The ISS serves as a microgravity and space environment research laboratory in which crew members conduct experiments in biology, human biology, physics, astronomy, meteorology, and other fields.
5. The station is divided into two sections, the Russian Orbital Segment (ROS), which is operated by Russia, and the United States Orbital Segment (USOS), which is shared by many nations.
6. The first ISS component was launched in 1998, with the first long-term residents arriving on 2 November 2000.

4. Fedor copies human movements, a key skill that allows it to remotely help astronauts or even people on Earth to carry out tasks while the humans are strapped into an exoskeleton.
5. On the website of one of the state backers of the project, the Foundation of Advanced Research Projects, Fedor is described as potentially useful on Earth for working in high radiation environments, demining and tricky rescue missions.
6. Though initially developed for the emergencies ministry, Fedor can also be seen shooting at targets from two handguns in a video posted by Russian space agency chief Dmitry Rogozin.
7. On board, the robot will perform tasks supervised by Russian cosmonaut Alexander Skvortsov, who joined the ISS in July and will wear an exoskeleton and augmented reality glasses in a series of experiments later this month.
8. Since Fedor is not trained to grab space station handles to move about in microgravity conditions, its legs will be immobilised on the space station.
9. In 2011, NASA sent up Robonaut 2, a humanoid robot developed with General Motors that had a similar aim of working in high-risk environments.
10. In 2013, Japan sent up a small robot called Kirobo along with the ISS's first Japanese space commander. Developed with Toyota, it was able to hold conversations — albeit only in Japanese.

MULTIPLE CRATERS ON MOON

Isro released the lunar surface images captured by the Terrain Mapping Camera 2 (TMC-2) on August 23 from an altitude of 4,375km. One set of images show impact craters such as Jackson, Mitra, Mach and Korolev. Jackson is an impact crater located in the northern hemisphere of the far side of Moon. It is a 71km diameter crater at 22.4°North, and 163.1°West (shown in inset).

What

1. The interesting feature at the western outer rim of Mach crater is another impact crater and Mitra (92 km diameter) crater named after Prof Sisir Kumar Mitra, who was an Indian physicist and Padma Bhushan recipient known for his pioneering work in the field of ionosphere and Radiophysics.
2. The Korolev crater seen in the image is a 437 km crater which has several small craters of varying sizes.
3. The TMC also captured impact craters Sommerfeld and Kirkwood. Sommerfeld is a large impact crater located in the farside northern latitudes of the Moon. It is a 169km diameter crater at 65.2°North and 162.4°West.
4. Sommerfeld has a relatively flat interior surrounded by a ring mountain and a number of smaller craters lie along the rim edge. The crater is named after Arnold Sommerfeld who is a German physicist pioneered in the field of atomic and quantum physics.
5. North east to this crater lies the Kirkwood crater named after the American astronomer Daniel Kirkwood, another well-formed impact crater which is approximately 68 km diameter.
6. Besides, the TMC also imaged the lunar north polar region imaged to capture craters such as Plaskett (109km), Rozhdestvenskiy (177km) and Hermite (104 km).
7. Rozhdestvenskiy is one of the coldest spots in the solar system with temperature dipping to nearly -300 Degree Celsius.

HUMANOID ROBOT DOCKS WITH ISS

A Russian Soyuz spacecraft carrying a humanoid robot docked with the International Space Station (ISS) on 27 August 2019. The FEDOR (Final

Experimental Demonstration Object Research) robot is on a planned mission to support the crew and test its skills. It will stay on the station until Sept. 7.

What

1. The first docking attempt on 24 August 2019 failed due to issues related to the automatic docking system.
2. The Skybot F-850 is the first humanoid robot sent to space by Russia. NASA sent a humanoid robot, Robonaut 2, to space in 2011 to work in hazardous environments.
3. FEDOR or Feodor is a Russian humanoid robot that replicates movements of a remote operator as well as performs a limited set of actions autonomously.
4. Originally it was called Avatar and was funded by Ministry of Emergency Situations for rescue operations but later its intended use was expanded to space operations.
5. The new name was given by Dmitry Rogozin. FEDOR is intended to be a platform for development of a series of robots although the first model was often called Fedor in media.
6. On 22 August 2019, a FEDOR robot was launched to the International Space Station. The plan is for it to spend one week and one half aboard the orbital outpost. The model going to space was given the name Skybot F-850.

NEW CLUES ON HUMANS EVOLUTION

A “**remarkably complete**” 3.8-million-year-old skull of an early human has been unearthed in Ethiopia, scientists announced on August 28, a discovery that has the potential to alter our understanding of human evolution. The skull, known as MRD, was discovered not far from the younger Lucy — the ancient ancestor of modern humans — and shows that the two species may have co-existed for about 100,000 years.

What

1. This skull is one of the most complete fossils of hominids more than 3 million years old, the renowned Ethiopian palaeoanthropologist of the Cleveland Museum of Natural History who is a co-author of two studies published on August 28 in the journal Nature.
2. It “looks set to become another celebrated icon of human evolution”, **joining the ranks** of other high-profile hominid findings, Fred Spoor of the Natural History Museum of London wrote in a commentary accompanying the studies.
3. Toumai (of the species Sahelanthropus tchadensis) is around 7 million years old and is considered by some palaeontologists to be the first representative of the human lineage.
4. It was discovered in Chad in 2001. Ardi (for Ardipithecus ramidus, another species of hominid) was found in Ethiopia in 1994 and is believed to be around 4.5 million years old.
5. Lucy, the famous Australopithecus afarensis, was discovered in Ethiopia in 1974 and is 3.2 million years old. Australopithecus afarensis is one of the longest-lived and most studied early human species. The new skull, MRD, belongs to the species Australopithecus anamensis.
6. Discovered in February 2016 at the site of Woranso-Mille, just 55 km from where Lucy was found in the Afar region of northeastern Ethiopia, **MRD offers “the first glimpse of the face of Lucy’s ancestor”**.
7. Other lesser-known Australopithecus fossils date back at least 3.9 million years, but **they featured only jaws and teeth. Without the skull, scientists’ understanding of the evolution of these extinct hominids has remained limited.**
8. Until now, there was a big gap between the oldest human ancestors, which are **about 6 million years old, and species like ‘Lucy’, which are two to three million years old.**

GLOBAL REGISTRY ON HUMAN GENOME EDITING

An expert advisory committee of the World Health Organisation (WHO) has approved the first phase of a global registry to track research on human genome editing as the **UN's international public health monitor** seeks to address the ethical and regulatory challenges surrounding promising new technologies to address gene based treatments.

What

1. New genome editing technologies hold great promise and hope for those who suffer from diseases we once thought were untreatable, **WHO's** director-general Dr. Tedros Adhanom Ghebreyesus said.
2. They also pose unique ethical, social, regulatory and technical challenges, he noted, adding that countries should not allow any further work on human germline genome editing in human clinical applications until the technical and ethical implications had been properly considered.
3. Accepting the **committee's** recommendation, WHO has now announced plans for an initial phase of the registry using the International Clinical Trials Registry Platform (ICTRP).
4. This phase will include somatic and germline clinical trials, the WHO said in the release. In order to ensure that the registry is fit for purpose and transparent, the committee will engage with a broad range of stakeholders on how it will operate.
5. The 18-member expert committee also announced an online consultation on the governance of genome editing.
6. The committee called on all relevant research and development initiatives to register their trials. To enhance the development of a global governance framework for human genome editing, the committee will undertake both online consultations and in-person engagement.

What is genome editing?

1. Genome editing (also called gene editing) is a group of technologies that give scientists the ability to change an organism's DNA.
2. These technologies allow genetic material to be added, removed, or altered at particular locations in the genome. Several approaches to genome editing have been developed.
3. A recent one is known as CRISPR-Cas9, which is short for clustered regularly interspaced short palindromic repeats and CRISPR-associated protein 9.
4. The CRISPR-Cas9 system has generated a lot of excitement in the scientific community because it is faster, cheaper, more accurate, and more efficient than other existing genome editing methods.
5. CRISPR-Cas9 was adapted from a naturally occurring genome editing system in bacteria. The bacteria capture snippets of DNA from invading viruses and use them to create DNA segments known as CRISPR arrays.

MISCELLANEOUS

FIRST INDIAN AIRLINE TO FLY OVER NORTH POLE
Air India hoisted its Boeing 777 aircraft over the North Pole to become the first Indian airline to operate commercial flights overflying the polar region. Its Delhi-San Francisco flight, which usually overflies the Atlantic or the Pacific ocean, cut across latitudes instead on 15 August 2019 to fly over zero degree north in a feat that would probably be Air India's last hurrah before it is thrown into the throes of privatisation.

What

1. Delhi-San Francisco flight AI-173 lifted off at 4 am, with about 243 passengers on board, overflew Pakistan, Afghanistan, Kazakhstan and Russia overflew the North Pole to cross over to the other side of planet Earth.
2. Air India first operated this route in 2007 when its pilots flew a brand new Boeing 777 from Seattle to Delhi. The fuel savings on the polar route are expected be in the region of 2 to 7 tons, depending on the wind conditions. The resultant decrease in carbon emissions will be about 6 ton to 21 ton per flight.
3. The cross-polar route was official opened to commercial flights in February 2001 by the US aviation regulator, marking an important milestone in air travel between North America and Asia.
4. Called the "**Santa's short-cut**" back then, among the challenges in operating the polar route today are: limited choice for diversion alternate airports, solar radiation, fuel freezing, passenger and aircraft retrieval in case of diversion.
5. Finnair was the first airline to fly the polar route, said an AI official. Among the airlines that fly the polar route, which are four routes north of 78 degree latitude, are Emirates, United, Air Canada, Aerochina etc.

KHEL RATNA AWARD

Asian and Commonwealth Games gold-medallist wrestler Bajrang Punia was on 16 August 2019 nominated **for the country's highest sporting honour** – the Rajiv Gandhi Khel Ratna award. His name was finalised by a 12-member selection committee on the opening day of a two-day meeting. The panel comprises the likes of Bhaichung Bhutia and MC Mary Kom among others.

What

1. Bajrang has been nominated for the Khel Ratna award. His name was a unanimous choice. The 12-member panel may add another athlete for the top honour on 17 August 2019 besides finalising the names for the Arjuna and Dronacharya awards.
2. Bajrang had last year won the gold medal in the 65-kg freestyle event at the Asian Games held in Jakarta.
3. He had also won the gold medal in the same category at the Gold Coast Commonwealth Games. He is also a two-time medallist at the world championships **and a strong medal hope for India at next year's Tokyo Olympics.**
4. He along with Vinesh Phogat was recommended by the Wrestling Federation of India (WFI) for the prestigious award. Punia recently defended his title at the Tbilisi **Grand Prix as he won the gold medal by prevailing over Iran's Peiman Bibyani in the 65kg final of the men's freestyle competition.**
5. The first recipient of the award was Chess Grandmaster Viswanathan Anand, who was honoured for his performance in the year 1991-92.

ARUN JAITLEY PASSED AWAY

Former Union minister Arun Jaitley died at AIIMS on 24 August 2019. Jaitley, 66, was undergoing treatment at the hospital for several weeks. He was kept under observation through the day, with a team of doctors including endocrinologists, cardiologists and nephrologists monitoring him. A lawyer by profession, Jaitley was the most important leader in Prime Minister Narendra Modi's cabinet during his first tenure and acted as the chief troubleshooter for the government, especially during the crucial times of demonetisation and GST rollout.

What

1. He became the finance minister in 2014 when BJP led by Narendra Modi swept to power. He also briefly held charge of the defence and information & broadcasting ministries.
2. He was the key force behind a number of government initiatives such as the establishment of the monetary policy committee, liberalisation of the foreign direct investment framework and abolition of the Foreign Investment Promotion Board.
3. As FM, Jaitley steered some of the most far-reaching reforms such as the goods and services tax (GST) and the Insolvency and Bankruptcy Code. His patient negotiations with states were said to have been key in securing their agreement to ensure the rollout of GST in July 2017.
4. Jaitley had a renal transplant in May last year at AIIMS, with Piyush Goyal filling in for him at the time. After having stopped attending office since early April 2018, he was back in the finance ministry on August 23, 2018.
5. He underwent surgery in the US in January this year, forcing him to skip the budget presentation. Goyal presented the interim budget for FY20 in his place.
6. In September 2014, he underwent bariatric surgery to correct the weight he had gained because of a long-standing diabetic condition.

FIRST INDIAN MALE TO WIN BWF MEDAL

B Sai Praneeth became the first Indian male shuttler in 36 years to secure a medal in the BWF World Championships after a **straight-game victory over Indonesia's** Jonatan Christie propelled him into the semifinals on 24 August 2019. World No. 19 Praneeth, who got the Arjuna Award this year, notched up a 24-22 21-14 win over Asian Games gold medallist and World No. 4 Jonatan in the quarterfinals.

What

1. Prakash Padukone was the first **Indian to win a men's singles World Championships medal** — a bronze — in the 1983 edition.
2. Praneeth, who had won the Singapore Open in 2017 and finished runners-up at Swiss Open earlier this year, came into the tournament with a 1-2 head-to-head count against the Indonesian.
3. In the opening game, the Indian jumped to a 8-4 lead, but Jonatan stepped up to claw back at 10-10 before Praneeth managed a slender 11-10 advantage at the break with the help of a delicate shot at the net. The duo continued their battle after the **breather as Jonatan kept breathing down the Indian's neck.**

UAE'S HIGHEST CIVILIAN AWARD

Prime Minister Narendra Modi was honoured with the 'Order of Zayed', the UAE's highest civilian award, on 24 August 2019 as a mark of appreciation for his efforts to boost bilateral ties between the two nations. The award has earlier been bestowed on several world leaders, including Russian President Vladimir Putin, Queen Elizabeth II and Chinese President Xi Jinping.

What

1. The award in the name of Sheikh Zayed bin Sultan Al Nahyan, the founding father of the UAE, acquires special significance as it was awarded to Prime Minister Modi in the year of the birth centenary of Sheikh Zayed.
2. India and the UAE enjoy warm, close and multi-faceted relations underpinned by **cultural, religious and economic linkages which, during the prime minister's previous visit to the UAE in August 2015, stood elevated to a comprehensive strategic partnership.** The **UAE in April had announced to confer the country's highest award on Modi.**

3. With an annual bilateral trade of about USD 60 billion, the **UAE is India's third-largest** trade partner. It is also the fourth-largest exporter of crude oil for India.
4. A 3.3 million-strong vibrant Indian community in the UAE nourishes the vibrant people-to-people contacts between our two friendly countries.

PM CONFERRED “THE KING HAMAD ORDER OF THE RENAISSANCE”

Prime Minister Narendra Modi on 24 August 2019 was honoured with “The King Hamad Order of the Renaissance” as he held talks with King of Bahrain Hamad bin Isa Al Khalifa on various bilateral and regional issues. Prime Minister Modi's visit to Bahrain is significant as it is the first visit of an Indian Prime Minister to the country.

What

1. Both leaders exchanged views on all matters of mutual interest,” External Affairs Ministry said, “I humbly accept The King Hamad Order of the Renaissance.
2. **This is a recognition of India's strong friendship with Bahrain**, which goes back hundreds of years and is expanding rapidly in the 21st century.
3. Modi is on the third leg of his three-nation tour to France, the UAE and Bahrain. Modi arrived here after wrapping up his visit to the UAE where he held talks with the Crown Prince of Abu Dhabi, Sheikh Mohammed bin Zayed Al Nahyan and discussed measures to improve trade and cultural ties between the two countries.
4. **Modi was also honoured with the ‘Order of Zayed’, the UAE's highest civilian award**, as a mark of appreciation for his efforts to boost bilateral ties between the two nations.

FIRST INDIAN TO WIN BWC'S GOLD

P.V. Sindhu on 25 August 2019 became the first Indian to win a Badminton World Championships (BWC's) gold by beating familiar rival Nozomi Okuhara of Japan in a lop-sided final in Basel. The Indian won 21-7 21-7 in the summit clash that lasted just 38 minutes. Two years after being robbed off the gold by Okuhara in an epic 110-minute final at Glasgow that went down as one of the greatest battles in badminton history, Sindhu finally exorcised the ghost of that heart-wrenching loss with a completely dominating win over the same opponent.

What

1. **It was Sindhu's fifth World Championships medal** — joint most for a woman singles player with former Olympics and world champion Zhang Ning of China — to go with the two successive silvers and a couple of bronze medals.
2. Sindhu has also won an Olympic silver in 2016 Rio Games, a silver at Gold Coast Commonwealth Games, an Asian Games silver at Jakarta and the BWF World Tour Finals last year.
3. The fifth seeded Indian, who enjoyed a 8-7 head-to-head lead over third seeded Okuhara ahead of contest, was simply unstoppable as she dished out an attacking game right from the start to race to 8-1 lead.

Flashback

1. This World Championship is a badminton tournament which was held from 19 to 25 August at St. Jakobshalle in Basel, Switzerland.
2. Basel was chosen to be the host of the 2019 edition of the championships over 2020 Summer Olympics host city, Tokyo.
3. The bid was approved by the Badminton World Federation during a council meeting in Kuala Lumpur, Malaysia.

FIRST CRIME COMMITTED IN SPACE

US space agency NASA is investigating what may be the first crime committed in outer space, The New York Times reported. Astronaut Anne McClain is accused of identity theft and improperly accessing her estranged wife's private financial records while on a six-month mission aboard the International Space Station (ISS).

The astronaut's spouse Summer Worden filed a complaint earlier this year with the Federal Trade Commission after learning McClain had accessed her bank account without permission, while Worden's family filed another with NASA's Office of Inspector General.

What

1. The International Space Station with **ESA's Columbus laboratory** flies 400 km high at speeds that defy gravity.
2. At 28 800 km/h it only takes 90 minutes for the weightless laboratory to make a complete circuit of Earth. Astronauts working and living on the Station experience 16 sunrises and sunsets each day.
3. The International Space Station (ISS) is a multi-nation construction project that is the largest single structure humans ever put into space.
4. Its main construction was completed between 1998 and 2011, although the station continually evolves to include new missions and experiments. It has been continuously occupied since Nov. 2, 2000.
5. The ISS includes contributions from 15 nations. NASA (United States), Roscosmos (Russia) and the European Space Agency are the major partners of the space station who contribute most of the funding; the other partners are the Japanese Aerospace Exploration Agency and the Canadian Space Agency.

INDIA'S FIRST WOMAN DGP PASSED AWAY

Kanchan Chaudhary Bhattacharya, **India's first woman Director General of Police (DGP)**, passed away following an illness in Mumbai on 26 August 2019 night. Bhattacharya, a 1973 batch officer, made history in 2004 when she was appointed as the DGP of Uttarakhand, thus becoming the first woman in the country to hold such position.

What

1. Bhattacharya was also the second woman IPS officer in the country, the first being Kiran Bedi. She relinquished her duties on October 31, 2007.
2. She was presented a ceremonial guard of honour by the Uttarakhand police at her farewell parade.
3. Hailing from Amritsar in Punjab, Bhattacharya was determined to become a police officer. As the first woman DGP of a state, Kanchan tried to fight the bias against women and it was due to her initiative that women home guards were given the responsibility of manning traffic points in cities.
4. After her retirement, she took a plunge into politics and unsuccessfully contested from Haridwar constituency in the 2014 Lok Sabha polls on an Aam Aadmi Party ticket.

FIRST COUNTRY TO ISSUED BSID

India has become the first country in the world to issue smart ID card to seafarers containing their facial biometric details which will replace the existing Continuous Discharge Certificate (CDC)—a passport-like document. The Biometric Seafarer Identity Document (BSID) was launched by shipping minister Masukh Mandaviya. The directorate general of shipping said total number of existing Indian seafarers who will be required to be issued BSIDs is around 3.5 lakh. All the existing

seafarers will be given BSID within the next two years. After this, it is estimated that around 15,000 new seafarers will be issued BSIDs annually.

What

1. The smart IDs have an inbuilt chip recording all the details of the seafarer. The cards can be read by any normal point of sale (PoS) or ATM reader machine and can be used by the immigration officers for quick processing.
2. The new facial biometric technology is a marked improvement over the two fingers or iris based biometric data, with modern security features.
3. It will make the identification of the SID holder more reliable and efficient while protecting their dignity and privacy. India had made a presentation on this technology at International Labour Organisation.
4. There has been a 35% increase in the number of Indian seafarers in the international shipping industry. The total number of Indian seafarers who were employed on Indian or foreign flag vessels increased from 1.54 lakh in 2017 to 20.87 lakh this year.
5. The new document will give foolproof identification to Indian seafarers which will facilitate their movement, make it easier for them to get jobs and help identify them from any location in the world. It conforms to the ILO convention.
6. The shipping ministry said at the time of data capture, the live face is cross-matched through passport photo using a face matching software.
7. The card has two optical security features - micro prints/ micro texts and Unique Guilloche pattern. A software has been developed for capturing the facial biometrics and its authentication through the public key infrastructure.
8. A record of each SID issued will be maintained in a national database and related information will be internationally accessible.
9. Nine data collection centres have been set up at Mumbai, Kolkata, Chennai, Noida, Goa, New Mangalore, Kochi, Vizag and Kandla for issue of BSID.
10. Every Indian seafarer who possesses a valid CDC issued by the government will be eligible for issue of a BSID.

GOVERNMENT BANS IMPORT OF PMAA

The government has banned the import of polymethyl methacrylate (PMAA), with effect from September 1, commerce and industry ministry said in a notification. Polymethyl methacrylate is a shatterproof replacement for glass. Import policy of polymethyl methacrylate is revised from free to prohibited with effect from September 1 this year. As per the existing import policy, imports of the product were free. India imported Rs 8.43 lakh worth of the product in the first quarter of 2019-20 compared with Rs 45.74 lakh in 2018-19.

What

1. Poly(methyl methacrylate) (PMMA), also known as acrylic, acrylic glass, or plexiglass as well as by the trade names Crylux, Plexiglas, Acrylite, Lucite, and Perspex among several others, is a transparent thermoplastic often used in sheet form as a lightweight or shatter-resistant alternative to glass.
2. The same material can be used as a casting resin, in inks and coatings, and has many other uses.
3. Although not a type of familiar silica-based glass, the substance, like many thermoplastics, is often technically classified as a type of glass (in that it is a non-crystalline vitreous substance) hence its occasional historical designation as acrylic glass.
4. Chemically, it is the synthetic polymer of methyl methacrylate. The material was developed in 1928 in several different laboratories by many chemists.