

# My Notes....

## NATIONAL

### 10% QUOTA IN SC

Defending its decision to introduce a 10 per cent economic quota, the Centre told the Supreme Court that the amendments did not violate the basic structure of the Constitution or the **apex court's 1992 ruling** in the Indra Sawhney case, and that the fifty percent ceiling on reservation **"is only applicable to reservation made under Article 15(4), 15(5) and 16(4) and does not apply to Article 15(6)"**.

What

1. In its affidavit in reply to a petition challenging the Constitutional (103rd Amendment) Act through which the economic criterion was introduced, the government said the move was made following the recommendations of the Commission for Economically Backward Classes, headed by Major General (Retd) S R Sinho.
2. The **commission was constituted** "to suggest the criteria for identification for economically backward classes (EBC) as well as to recommend welfare measures and quantum of reservation in education and Government employment **to the extent as appropriate**".
3. In its report dated July 2, 2010, **the commission recommended that "all BPL (Below Poverty Line) families among general category as notified from time to time, and also all families whose annual family income from all sources is below the taxable limit (as may be revised from time to time) should be identified as EBCs"**.
4. **Also, "keeping in view the differentiation adopted by" the Supreme Court in the Indra Sawhney case between the "weaker sections of the people" and "backward classes of citizens", the commission "resolved that indicators that were used for the identification of socio-economic backward classes cannot be used for identification of economically backward classes, mainly because, at first place, classes are not homogenous, and secondly, they do not have a common criteria like that of castes, on the basis of which, economic backwardness can be evolved", the affidavit filed by the Social Justice Ministry said.**
5. It said that the Sinho Commission **"had, on the basis of NSSO (National Sample Survey Office) Estimates, concluded that BPL percentage was not just high among STs, SCs and OBCs, but were also high amongst the General category, being 18.2 per cent"**.
6. The NSSO (2004-05) and NFHS (National Family Health Survey) (1998-99) data suggest that there is a need to make provisions similar to the backward classes for the economically weaker sections, the affidavit added.
7. **The commission also stated that "given the existing legal premise that Backward Classes cannot be identified on the basis of economic criteria for the purpose of reservation in employment and admission in educational institutions, the states were unable to identify Economically Backward Classes for extending benefits of reservation till necessary Constitutional Amendment were made or the Supreme Court directs raising the ceiling for reservation beyond 50 per cent"**.
8. The government said **India's population of 135 crore comprises considerably large sections of the lower- middle class and those living below poverty line, and "the State has a duty as per the directive of Article 46 of the Constitution to promote the educational and economic interests of the weaker sections of the people"**.

## Indra Sawhney vs Union of India case

1. The affidavit said that the conclusions drawn in the Indra Sawhney vs Union of India case “are inapplicable to the present case as the said judgment was delivered while determining the constitutional validity of certain Office Memorandums issued by the Government of India in the year 1990, which provided for reservations for the backward classes of citizens in services under the State”, while “the present challenge...is in relation to the validity of a constitutional amendment made wherein Article 15(6) and Article 16(6) have been inserted, which did not exist on the book when Indra Sawhney was delivered.
2. The Ministry said that the court, in the Indra Sawhney case, “did not have the opportunity to deliberate or hold in relation to the Constitutional amendment, whereby the new criteria of ‘economically weaker sections of the society’ have been introduced”.
 

Violation Basic Structure

  1. On the argument that the amendments violate the basic structure of the Constitution, the Centre said, “Basic structure’ comprises many features like several pillars in a foundation.
  2. The significance of these pillars is that if one of them is removed, the entire edifice of the Constitution will fall. Hence, in judging a constitutional amendment, the question to be addressed is whether the said amendment would lead to a collapse of the edifice of the Constitution.”
  3. The affidavit said that “merely affecting or impinging upon an article embodying a feature that is part of the basic structure is not sufficient to declare an amendment unconstitutional”, and that “to sustain a challenge against a constitutional amendment, it must be shown that the very identity of the constitution has been altered”.
  4. Thus, a mere amendment to an Article of the Constitution, even if embodying a basic feature, will not necessarily lead to a violation of the basic feature involved”, it stated.
  5. The government contended that the “newly inserted provisions of Article 15(6) and Article 16(6) are enabling provisions for advancement of the Economically Weaker Sections, and are, in fact, in conformity with the principle of Reservation and Affirmative action, which are the touchstones of protection of equality of citizens and also the basis under Article 15(1), Article 15(2), Article 16(1) and 16(2). Therefore the impugned Amendment is in conformity with the constitutional principles and therefore does not violate the basic structure doctrine”.
3. It stated that “the limit of 50% is only applicable to reservation made under Article 15(4), 15(5) and 16(4) and does not apply to Article 15(6)”, and that the economic quota for EWS has been introduced “without disturbing the existing reservations for SCs, STs and OBCs”.
4. On the contention that educational institutions could not be compelled to follow this, it said that “access to Higher Education, including professional education to students belonging to weaker segments of the society, is a matter of major concern, and the number of seats available in aided or Government maintained institutions, is limited in comparison to those in private unaided institutions”.

### Article 46

1. Article 46 of the Directive Principles of State Policy calls upon the State to “promote with special care the educational and economic interests of the weaker

section of the population and protect them from social injustice”, the government pointed out.

2. The affidavit added that private unaided institutions play an important role providing education to over 1.34 crore students in various programmes, and “it is therefore essential that the socially and economically weaker section gets access to these facilities as mandated in the Constitution”.

## INDIA GETS FIRST TIR SHIPMENT

The **first shipment under the United Nations ‘Transports Internationaux Routiers’ (TIR) convention** arrived in India from Afghanistan through **Iran’s Chabahar Port**.

The consignments arrived at port of Nhava Sheva, Mumbai and Mundra on 13 March 2019. TIR convention will help in fast and easy movement of goods across multiple countries under a common customs document and guarantee.

What

1. India had joined the TIR Convention (the United Nations Customs Convention on International Transport of Goods under cover of TIR Carnets) on June 15, 2017.
2. The convention allows goods to be outlined in a TIR carnet and sealed in load compartments.
3. Customs officials verify the carnet and check the seals, with no need for physical checking of the contents, enabling shipments to pass through countries without being opened at borders.
4. Reciprocal recognition of customs controls is at the heart of the Convention. This enables a facilitative and non-intrusive environment for multi-modal transport of goods through several countries.
5. **The convention will help boost India’s exports and enable greater participation in the global value chains.**
6. TIR will play a pivotal role in improving ease of doing business and pave the way for smoother and safer transport of goods across international borders and will help boost trade between India, Central Asia, Europe and Russia.

Strong catalyst

1. It will act as a strong catalyst for moving goods using the multi-modal transportation route like Chabahar and International North-South Transport Corridor (INSTC). The system is a win-win-win model for Customs.
2. The opening of Chabahar Port for TIR is hugely significant — offering connectivity for landlocked countries, seamless border crossing facilitation and intermodal capabilities.



3. TIR has been chosen by these three countries as a key tool to help activate the Chabahar transport agreement. The operation will definitely open the door for activation of other intermodal corridors such as International North South Transport Corridor — connecting India to Central Asia, Russia and eventually Europe.
4. FICCI has been appointed as National Issuing & Guaranteeing Association and system is managed worldwide by the International Road Transport Union (IRU), Geneva and overseen by the United Nations Economic Commission for Europe (UNECE).
5. More than 34,000 operators are authorised to use the TIR system and in 2017, around 1.2 million TIR Carnets were issued worldwide.
6. Ultimately, the system facilitates and encourages international trade, and thereby provides many advantages and benefits to the national economy by simplifying the movement of national and international transport, giving access to over 62 TIR operational countries.

## GLOBAL RESOURCES OUTLOOK 2019

The resource extraction has more than tripled since 1970 in the world, including a five-fold increase in the use of non-metallic minerals and a 45 per cent increase in fossil fuel use, informed a UN report - 'Global Resources Outlook 2019', released on 12 March 2019 during the fourth United Nations Environment Assembly (UNEA-4).

What

1. From 1970 to 2017, the annual global extraction of materials grew from 27 billion tonnes to 92 billion tonnes, tripling in that time and continuing to grow.
2. Since 2000, growth in extraction rates have accelerated to 3.2 per cent per annum, driven largely by major investments in infrastructure and higher material living standards in developing and transitioning countries, especially in Asia.
3. While the use of metal ores increased by 2.7 per cent annually, the fossil fuel usage went from 6 billion tonnes in 1970 to 15 billion tons in 2017. Biomass increased from 9 billion tonnes to 24 billion tonnes – mostly for food, feedstock and energy.
4. Over the past five decades, the population has doubled and global domestic product has increased four times. The report finds that, in the same period, annual global extraction of materials grew from 27 billion tonnes to 92 billion tonnes (by 2017). This will double again by 2060 on current trends.
5. Released on the second day of UN Environment Assembly, '**Global Resources Outlook 2019**' is major a global report on the status and trends of natural resource use and management.
6. The report analyses the demographic and socioeconomic forces driving the extraction and use of natural resources worldwide, and reports on how these drivers and pressures have determined our current state.
7. The report is **prepared by the UN's International Resource Panel** (consists of eminent scientists).
8. The International Resource Panel has 40 expert members from a wide range of academic institutions and scientific disciplines.
9. **With the theme, 'Innovative Solutions for Environmental Challenges and Sustainable Consumption and Production,'** UNEA-4 is focussing on food systems, resource efficiency through life-cycle approaches, and sustainable business development.

UNEA-4 will address:

1. Environmental challenges related to poverty and natural resources management, including sustainable food systems, food security and halting biodiversity loss;
2. Life-cycle approaches to resource efficiency, energy, chemicals and waste management
3. Innovative sustainable business development at a time of rapid technological change.

#### Flashback

1. The fourth session of the UN Environment Assembly (UNEA-4) will take place from 11-15 March 2019 in Nairobi, Kenya, as agreed during UNEA-3 in December 2017 (UNEP/EA.3/L.2).
2. By the same text, the Assembly decided that following the 2019 session, UNEA will convene during the last week each February, unless otherwise decided by UNEA.
3. The President of UNEA-4 will be Estonia. **Under the overall theme**, 'Innovative Solutions for Environmental Challenges and Sustainable Consumption and Production'.

## INDIA RANKS 11TH IN GOLD HOLDING

India, which is the world's largest consumer of gold, has the 11th largest gold reserve, with the current holding pegged at 607 tonnes, as per the latest report by the World Gold Council (WGC). **India's overall position in terms of total gold holding would have been tenth** had the list included only countries. Whereas, International Monetary Fund (IMF) is included and is third on the list with total gold reserves of 2,814 tonnes.

What

1. The numero uno slot is occupied by the U.S., which boasts of gold reserves of 8,133.5 tonnes, followed by Germany with 3,369.7 tonnes.
2. Italy and France complete the top five list with reserves of a little over 2,400 tonnes each. Meanwhile, among Asian countries, China and Japan have more reserves of the precious metal when compared to India.
3. China – WGC takes into account **only 'Mainland China'** – has reserves of 1,864.3 tonnes, while Japan has gold reserves of 765.2 tonnes.

#### Flashback

1. The World Gold Council is the market development organisation for the gold industry. It works across all parts of the industry, from gold mining to investment, and their aim is to stimulate and sustain demand for gold.
2. They frequently publish research that demonstrates **gold's strength as a preserver of wealth** – both for investors and countries. They also provide analysis of the industry, offering insights into the drivers of gold demand.
3. They have also launched various products such as SPDR GLD and gold accumulation plans in India and China.
4. The World Gold Council is an association whose **members comprise the world's leading gold mining companies**. It helps to support its members to mine in a responsible way and developed the Conflict Free Gold Standard.
5. Headquartered in London United Kingdom, they have offices in India, China, Singapore, Japan and the United States.

- Following the multi-decade high in gold reserves growth in 2018, central banks' appetite remained healthy at the start of 2019.
4. Gross purchases of 48 tonnes and gross sales of 13 tonnes led to global gold reserves rising by 35 tonnes on a net basis in January, with sizeable increases from nine central banks.
  5. This is the largest January increase in gold reserves in our records [back to 2002], and illustrates the recent strength in gold accumulation.
  6. Countries like Taiwan, Portugal, Kazakhstan, Uzbekistan, Saudi Arabia, United Kingdom, Lebanon and Spain, along with the European Central Bank, complete the top 20 list of largest gold reserves.
  7. Pakistan, with its gold reserves of 64.6 tonnes, occupies the 45th position.

## AMENDMENT IN HAZARDOUS WASTE RULES 2016

In order to strengthen the implementation of environmentally sound management of hazardous waste in the country, the Ministry of Environment, Forest and Climate Change has amended the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 vide notification G.S.R. G.S.R. XX (E), dated 01 March 2019. The amendment has been **done keeping into consideration the “Ease of Doing Business” and boosting “Make in India” initiative by simplifying the procedures under the Rules, while at the same time upholding the principles of sustainable development and ensuring minimal impact on the environment.**

### Salient features

1. Solid plastic waste has been prohibited from import into the country including in Special Economic Zones (SEZ) and by Export Oriented Units (EOU).
2. Exporters of silk waste have now been given exemption from requiring permission from the Ministry of Environment, Forest and Climate Change.
3. Electrical and electronic assemblies and components manufactured in and exported from India, if found defective can now be imported back into the country, within a year of export, without obtaining permission from the Ministry of Environment, Forest and Climate Change.
4. Industries which do not require consent under Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981, are now exempted from requiring authorization also under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, provided that hazardous and other wastes generated by such industries are handed over to the authorized actual users, waste collectors or disposal facilities.

#### Flashback

1. Hazardous waste is waste that has substantial or potential threats to public health or the environment.
2. Characteristic hazardous wastes are materials that are known or tested to exhibit one or more of the following hazardous traits: Ignitability, Reactivity, Corrosivity and Toxicity.
3. Listed hazardous wastes are materials specifically listed by regulatory authorities as hazardous wastes which are from non-specific sources, specific sources, or discarded chemical products.
4. Hazardous wastes may be found in different physical states such as gaseous, liquids, or solids.

## ‘AZAADI KE DIWANE’ MUSEUM

The Minister of State for Culture (Independent charge) and Environment, Forest and Climate Change, Dr. Mahesh Sharma inaugurated ‘Azaadi **ke Diwane**’ museum at Red Fort, Delhi on 5 March 2019. Created by Archaeological Survey of India (ASI), the museum within the Red Fort complex pays homage to all the unsung heroes of freedom struggle of the nation, who would have otherwise been merged away in forgetfulness. The museum is fifth in the series of recently inaugurated museums in the Red Fort Complex - others being, Subhash Chandra Bose and INA museum, Yaad-e-Jallian museum, Museum on 1857 - **India’s first war of Independence** and Drishyakala - Museum on Indian Art.

What

1. The **‘Azaadi ke Diwane’ museum** talks about the sacrifices of great freedom fighters. It pays tribute to the selfless sacrifices of the revolutionaries, brave female freedom fighters and valiant children.
2. **This new museum ‘Azaadi ke Diwane’ is started in the series of KrantiMandir** to inspire the younger generation and letting them know the cost of freedom that the great fighters achieve by sacrificing their life.
3. The museum is a modern state-of-the-art, informative and educational exhibition, involving multi-sensory technologies to engage the visitors.
4. It is so designed that as one moves from one section of the gallery to the other, a sense of awakening and spiritual awareness overwhelms an individual, a feeling of patriotism sweeps through, inspiring the visitors to relive the struggle of the Indian Freedom fighters and value the freedom that we so cherish today.
5. **Earlier, on 23rd January 2019, Hon’ble Prime Minister, Shri Narendra Modi** inaugurated the Subhash Chandra Bose and Indian National Army (INA) museum at Red Fort, Delhi.
6. **The museum not only provides a detailed account of Netaji’s life and the history** of Indian National Army (INA) but also showcases various valuable artefacts related to both.
7. The Red Fort Complex also houses other museums – the Yaad-e-Jallian museum, the Museum on 1857- **India’s first war of Independence and the Drishyakala- Museum on Indian Art.**
8. The Yaad-e-Jallian museum provides an authentic account of Jallian wala Bagh massacre that happened on April 13th, 1919.
9. The museum also showcases heroism, valour and sacrifices made by Indian soldiers during World War-I.
10. The Museum on 1857- **India’s first war of Independence** portrays the historical narrative of 1857 war of independence, showcasing the valour and sacrifices made by Indians during the period while the Drishyakala- Museum on Indian Art showcases Indian art works from 16th century **till India’s independence.**

## AKULA-II CLASS NUCLEAR SUBMARINE

On 07 March 2019, India signed a contract with Russia to lease an Akula-2 class nuclear attack submarine for a period of 10 years **commencing from 2025. India’s tryst** with nuclear-powered submarines began with the lease of a Charlie-1 class nuclear attack submarine in 1988 from the erstwhile Soviet Union for a period of three years. It was returned in 1991 and in that period had provided the Indian Navy invaluable knowledge in understanding the complexity of operating and maintaining nuclear submarines.

What

1. In 2012, an Akula-2 class submarine was leased for a period of 10 years. It is also called INS Chakra and will be in the Indian Navy till 2022. There is of course the possibility of the lease brings extended beyond that period.

2. More significantly, the lease of these submarines also underlines the depth and durability of the Indo-Russian strategic relationship as no country has ever leased or transferred a nuclear submarine to any other country.
3. Akula class submarines (Project 971), which first entered service with the Soviet Union in 1985, were the most advanced attack submarines in the world.
4. Now in their fourth iteration, regular improvements and upgradations have ensured that these are still considered amongst the most lethal of contemporary nuclear attack submarines.
5. It is understood that the submarine being leased to India will be modified with an indigenous mix of equipment in its communication and sensor suite before it is handed over to the IN.
6. This is a positive development towards the national endeavour for achieving self-reliance in our defence requirements and our indigenous submarine building programme.

## NEW POLICY FOR HIGHWAY PROJECTS

The government has unveiled a policy for resolving stalled highway projects worth nearly Rs 30,000 crore, including those where proceedings have been initiated against the companies before the bankruptcy tribunal. The move is aimed at unlocking money of both lenders and private players, including crisis-hit IL&FS, which is caught in about 28-30 projects as work has come to a standstill due to shortage of funds. According to a road transport ministry circular issued on March 9, agencies such as NHAI can foreclose the contract by signing a supplementary agreement. It said the authority will make full and **final payment to the private player for the “value of work done” or 90% of the debt due, whichever is lower.**

What

1. The value of work done will be arrived at after a detailed assessment of the progress and the debt due will be as per the contract agreement, which mentions the exact cost of the project. Nearly all the stuck projects were being implemented on a build operate and transfer (BOT/Toll) mode.
2. The circular also defines the projects that would qualify for such a resolution — projects where work has stopped due to inability of the contractor or concessionaire on account of proceedings initiated before the NCLT (National Company Law Tribunal) under the Insolvency and Bankruptcy Code or default on account of both the clients, which could be NHAI, PWD and the private player.
3. Once the private player exits, we can invite bids for completing the project and start work. Similarly, the lenders would get back some portion of the loan, rather than losing the entire amount.
4. In the existing concession agreement there is no provision for any payment, if the contract is terminated before total or provisional completion of the project due to **contractor’s default.**

### Flashback

1. The National Highways Authority of India (NHAI) is an autonomous agency of the Government of India, responsible for management of a network of National Highways in India.
2. It is a nodal agency of the Ministry of Road Transport and Highways. NHAI has signed a memorandum of understanding (MoU) with the Indian Space Research Organization for satellite mapping of highways.
3. The NHAI was created through the promulgation of the National Highways Authority of India Act, 1988.

## AL NAGAH 2019

Exercise Al Nagah III, third in the series of bilateral joint exercise between India and Oman was held from 12 to 25 March 2019 at Jabel Al Akhdar Mountains in Oman. The exercise was seen both the armies exchanging expertise and experience in tactics, weapon handling and firing, with an aim to enhance interoperability in counterterrorist operations in semi urban mountainous terrain.

What

1. India-Oman bilateral security ties have continued to develop since the beginning of India-Oman Joint Military Cooperation meetings in 2006.
2. Exercise Al Nagah III follows the first two joint exercises that were held in Oman in January 2015 and India in March 2017 respectively.
3. Similar exercises are also in vogue between the navies and air forces of both the nations thus underscoring the growing bilateral military and strategic partnership between the two important nations of Indian Ocean Region (IOR).
4. The Indian Army contingent is going to be represented by 04 Officers, 09 Junior Commissioned Officers and 47 other ranks of 10th Battalion of the Garhwal Rifles.
5. Similar strength is also to be fielded by Jabel Regiment of Royal Army of Oman (RAO).
6. Observer delegation comprising senior officers of both the armies will witness the validation exercise to be held on 25 March 2019.
7. The exercise will go a long way in enchaining understanding of capabilities and strengthening camaraderie between both the Armies.

## THIRD TEST-FIRING OF GUIDED PINAKA SUCCESSFUL

India successfully carried out the third test-fire of the guided Pinaka rocket from Pokhran ranges after two successful runs on March 11, the Defence Research and Development Organisation said. The consecutive successful mission of guided Pinaka proves the efficacy, reliability and high precision capabilities of the weapon system, the government statement said. All the three trials met mission objectives.

What

1. The weapon system is equipped with state-of-the-art guidance kit comprising of an advanced navigation and control system.
2. In both the missions, the weapon systems impacted the intended targets with high precision and achieved desired accuracies
3. Telemetry Systems tracked and monitored the vehicle all through the flight path. All the mission objectives have been met.
4. The indigenously-developed Guided Pinaka by DRDO, **India's central agency responsible for**

### Flashback

1. Pinaka is a multiple rocket launcher produced in India and developed by the Defence Research and Development Organisation (DRDO) for the Indian Army.
2. The system has a maximum range of 40 km for Mark-I and 75 km for Mark-II and can fire a salvo of 12 HE rockets in 44 seconds.
3. The system is mounted on a Tatra truck for mobility. Pinaka saw service during the Kargil War, where it was successful in neutralising enemy positions on the mountain tops.
4. It has since been inducted into the Indian Army in large numbers.

military research and development, will significantly boost the capability of the artillery to make precision hits.

5. The multi-barrel rocket system Pinaka is an area weapon system to supplement the existing artillery gun at ranges beyond 30 kilometres, having quick reaction time and high rate of fire.

## INTERNATIONAL

### FIRST EVER DOCTOR HONORIS CAUSA FOR INDIAN

**India's Vice President M. Venkaiah Naidu** is the first Indian to be conferred the Doctor Honoris Causa by the University for Peace (UPEACE), Costa Rica. Naidu, on being conferred the award felt that this honor conferred on him was, in a certain sense, global acknowledgment of the age-old Indian values of peace and harmony embedded in our **philosophy of 'Vasudhaiva Kutumbakam'**.

What

1. UPEACE has been established by the United Nations in 1980 **in 'recognition of his contribution to the rule of law, democracy, sustainable development, and peace'**.
2. India was one of the founding members. The Charter of the University includes promoting world peace through education.
3. Previous recipients of this award include Ms Laura Chinchilla former President of Costa Rica, Thomas Buergenthal, former Judge of the International Court of Justice, Ms Vineta Diop, founder of FEMME Africa Solidarite and Special Envoy of the African Union Commission for Women, Peace and Security, Aristides Royo, former President of Panama, Takeju Ojata, President of NIPPON Foundation.
4. UPEACE had stated that the Indian subcontinent has been a perpetual laboratory for validating the omnipotent values of universal peace, humanism, tolerance, and coexistence.
5. The teachings of inspirational figures like Swami Vivekananda and Mahatma Gandhi are extremely relevant for the transformation of contemporary conflicts of all kinds around the world.
6. Recognizing India as a major player in for the maintenance of international peace and security, UPEACE is keen on India playing a larger role in Sustainable Development Goals (SDG) ahead of a major conference this year.
7. Being a leader in South-South Cooperation, the University has reached out to India for getting involved in working on developing Objective 16 of the Sustainable Development Goals (SDG), in preparation for 2019 conference at UN Headquarters in New York.
8. The University headquartered in Costa Rica has Centers in Addis Ababa, The Hague, Vienna, and New York. The secretary general of the UN is the honorary president of the university.
9. The studio of the University **is entitled 'The Mahatma Gandhi Studio'**. In the past faculty members from Benaras Hindu University, Islamic University of Science and Technology in Srinagar, and Jamia Millia University, on International Peace Studies have been trained.

### INDIA AT OIC

External affairs minister Sushma Swaraj arrived in Abu Dhabi on 1 March 2019 to attend the inaugural session of the Organisation of Islamic Cooperation (OIC) meeting in Abu Dhabi where she was invited as a "guest of honour". At the summit, Swaraj will address

the plenary of the two-day 46th session of the Council of Foreign Ministers of the 57-member body. She has been invited by UAE Foreign Minister Abdullah bin Zayed Al Nahyan to address the OIC meeting. The minister is likely to underscore India's long and historical relationship with the OIC member countries.

What

1. This is the first time that India has been invited to the summit. India is neither a member nor an observer of the group, despite having the third largest Muslim population in the world.
2. Countries like Russia and Thailand that have a significant minority Muslim population are observer states.
3. Fifty years ago, in 1969 in Morocco, President Fakhruddin Ali Ahmed was invited to attend the first summit of the grouping (on Saudi Arabia's suggestion) only for the invitation to be withdrawn (and the delegation had to return midway) after Pakistan objected.
4. India attends the summit at a time when tensions between India and Pakistan are at an all-time high. The invitation was opposed by Pakistan and it has threatened to boycott the meet over India's participation.
5. India has said the invitation is a "welcome recognition of the presence of 185 million Muslims in India and of India's contribution to the Islamic world".
6. The invitation is a big setback for Pakistan (and a diplomatic victory for India) which has used the platform to abuse India (by talking of 'human rights violations in Kashmir') and has consistently opposed India's entry into the group.
7. The OIC has usually been supportive of Pakistan and often sided with Islamabad on the Kashmir issue.

What is OIC?

1. The OIC — formerly Organisation of Islamic Conference — is the second largest inter-governmental organisation in the world after the UN, with a membership of 57 states in four continents.
2. The OIC describes itself as “the collective voice of the Muslim world”, and its stated objective is “to safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony among various people of the world”.
3. The OIC has reserved its membership for Muslim-majority countries. Russia, Thailand, and couple of other small countries have Observer status.

Why now?

1. India's ties with West Asia, especially UAE, has grown stronger in the last couple of years.
2. Qatar had first proposed observer status for India in 2002. Last year, Turkey and Bangladesh had asked for India's inclusion.
3. India enjoys cordial relations with most OIC members individually. UAE, which issued the invitation and has Indians as one-third of its population, has invested heavily in India's infrastructure.
4. It has also helped India's fight against corruption by deporting fraudsters like Rajiv Saxena and Christian Michel in the AgustaWestland case on India's request.

## 7TH RCEP INTERSESSIONAL MINISTERIAL MEETING

The Ministers from the 16 RCEP Participating Countries (RPCs) attended the 7th RCEP Intersessional Ministerial Meeting held on 2 March 2019 in Siem Reap, Cambodia.

The Meeting was chaired by Chutima Bunyapraphasara, Acting Minister of Commerce of Thailand, reviewed the developments since the 2nd RCEP Summit on 14 November 2018 in Singapore, particularly the outcomes of the 2nd Special TNC Meeting held on 25-26 January 2019 in Jakarta, Indonesia, and the 25th RCEP Trade Negotiating Committee (TNC) Meeting and Related Meetings held on 19-28 February 2019 in Bali, Indonesia.

What

1. Union Minister of Commerce & Industry and Civil Aviation, Suresh Prabhu, also attended the 7th RCEP Intersessional Ministerial Meeting in Cambodia.
2. **The Ministers recalled the Leaders' determination** to conclude a modern, comprehensive, high quality, and mutually beneficial RCEP in 2019, and resolved to exert utmost effort to achieve this target.
3. They commended the RCEP Trade Negotiating Committee (TNC) for the good progress made to date on both market access and text-based negotiations but at the same time recognized that more work still needs to be done to advance both aspects of the negotiations.
4. The Ministers urged all RPCs to address specific sensitivities while working towards achieving commercially meaningful outcomes. The Ministers remained confident that with collective commitment and pragmatism, the chapters and annexes that would comprise the RCEP Agreement can be concluded soon.
5. The Ministers reiterated that it is the collective responsibility of all RPCs to ensure progress by overcoming negotiation challenges and finding resolution to the remaining issues through constructive engagement.
6. **To ensure that progress is made towards meeting the Leaders' target for conclusion in 2019**, the Ministers agreed to intensify engagement for the remaining of the year, including by convening more intersessional meetings.
7. The Ministers agreed to meet next at the [8th RCEP Intersessional Ministerial Meeting to be held after the 27th RCEP TNC Meeting and Related Meetings in July/August 2019] [7th RCEP Ministerial Meeting in September 2019].

#### Flashback

1. Regional Comprehensive Economic Partnership (RCEP) is a proposed free trade agreement (FTA) between the ten member states of the Association of Southeast Asian Nations (ASEAN) (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam) and the six Asia-Pacific states with which ASEAN has existing free trade agreements (Australia, China, India, Japan, South Korea and New Zealand).
2. RCEP negotiations were formally launched in November 2012 at the ASEAN Summit in Cambodia.
3. The free trade agreement is scheduled and expected to be signed in November 2018 during the ASEAN Summit and Related Summit in Singapore, after the first RCEP summit was held on 14 November 2017 in Manila, Philippines.
4. RCEP is viewed as an alternative to the Trans-Pacific Partnership (TPP), a proposed trade agreement which includes several Asian and American nations but excludes China and India.

## BREXIT DEAL AGAIN REJECTED

**Britain's parliament rejected PM Theresa May's deal to quit the European Union** for a second time on 12 March 2019, deepening the country's worst political crisis for

generations, 17 days before the planned departure date. Lawmakers **voted against** May's amended Brexit deal by 391 to 242 as her last-minute talks with EU chiefs to assuage her **critics' concerns ultimately proved fruitless. The vote puts the world's fifth largest** economy in uncharted territory with no obvious way forward: exiting the EU without a deal, delaying the March 29 divorce date, a snap election, or even another referendum are all now possible.

What

1. May might even try a third time to get parliamentary support in the hope that hardline eurosceptic lawmakers in her Conservative Party, the most vocal critics of her withdrawal treaty, might change their minds if it becomes more likely that Britain might stay in the EU after all.
2. While she lost, the margin of defeat was smaller than the record 230-vote loss her deal suffered in January.
3. If this vote is not passed, if this deal is not passed, then Brexit **could be lost," a hoarse-voiced** May told lawmakers before her deal were defeated.
4. Sterling, which had earlier in the day fallen by two percent to \$1.3005, was trading at around \$1.3082 shortly after the vote.
5. Lawmakers are now due to vote on 13 March 2019 on whether Britain should exit **the world's biggest trading bloc without a deal, a scenario business leaders warn** would bring chaos to markets and supply chains, and other critics say could cause shortages of food and medicines.

#### Flashback

1. Brexit is the proposed withdrawal of the United Kingdom (UK) from the European Union (EU), which is scheduled to take place on 29 March 2019 when the period for negotiating a Withdrawal Agreement will end unless an extension is agreed.
2. The UK joined the European Communities (EC) in 1973 under the Conservative government of Edward Heath, with continued membership endorsed by a referendum in 1975.

## WMDS TO NON-STATE ACTORS

The 9th round of the India-US Strategic Security Dialogue was held in Washington DC on March 13 and two sides reaffirmed to deny Weapons of Mass Destruction to non-state actors and work towards setting up US nuclear plant in India agreement for which was reached few years back. The Indian delegation was led by Vijay Gokhale, Foreign Secretary, while the U.S. delegation was led by Andrea Thompson, Under Secretary of State for Arms Control and International Security.

What

1. The two sides exchanged views on a wide range of global security and nonproliferation challenges and reaffirmed their commitment to work together to prevent the proliferation of weapons of mass destruction and

#### Flashback

1. A weapon of mass destruction (WMD) is a nuclear, radiological, chemical, biological, or any other weapon that can kill and bring significant harm to a large number of humans or cause great damage to human-made structures (e.g., buildings), natural structures (e.g., mountains), or the biosphere.
2. The scope and usage of the term has evolved and been disputed, often signifying more politically than technically.
3. Originally coined in reference to aerial bombing with chemical explosives during World War II, it has later come to refer to large-scale weaponry of other technologies, such as chemical, biological, radiological, or nuclear.

- their delivery systems and to deny access to such weapons by terrorists and non-state actors.
2. The two sides committed to strengthen bilateral security and civil nuclear cooperation, including the establishment of six U.S. nuclear reactors in India.
  3. **The United States reaffirmed its strong support of India's early membership in the Nuclear Suppliers Group.**
  4. Earlier, on March 12 the third round of the India-U.S. Space Dialogue, where they discussed trends in space threats; respective national space priorities; and opportunities for cooperation bilaterally and in multilateral fora.

## ECONOMY

### PM-SYM LAUNCHED

Prime Minister Narendra Modi on 5 March 2019 launched a national pension scheme — Prime Minister Shram Yogi Maandhan Yojana (PM-SYM) — for the workers and labourers of unorganised sector, the scheme was announced in the interim budget in February this year.

Features of the scheme aimed

1. The scheme will provide an assured monthly pension of Rs 3,000 for workers in the unorganised sector with a monthly income of up to Rs 15,000, from the retirement age (60 years). This will be on a monthly contribution of a small amount during their working age.
2. 42 crore workers from un-organised sectors are eligible for this pension scheme by contributing Rs 55 to Rs 200 rupees a month
3. Interim Finance Minister Piyush Goyal had announced the scheme during this **year's Interim Budget speech on February 1. An unorganised sector worker** joining pension yojana at the age of 29 years will have to contribute only Rs 100 per month until the age of 60 years.
4. The Centre will contribute an equal amount per month-per person availing the scheme.
5. At least 10 crore labourers and workers in the unorganised sector are expected to benefit from PMSYM within the next five years. The Centre has allocated Rs 500 crore for the scheme.

### ONE NATION, ONE CARD LAUNCHED

Prime Minister Narendra Modi launched One Nation, One Card for transport mobility at a function in Ahmedabad on 5 March 2019. The Indigenous Automatic Fare Collection System based on One Nation One Card Model i.e. National Common Mobility Card (NCMC) is the first of its kind in India. **India's First Indigenously Developed Payment** Eco-system for transport consisting of NCMC Card, SWEEKAR (Swachalit Kiraya: Automatic Fare Collection System) and SWAGAT (Swachalit Gate) is based on NCMC Standards.

What

1. These are bank issued cards on Debit/Credit/Prepaid card product platform. The customer may use this single card for payments across all segments including metro, bus, suburban railways, toll, parking, smart city and retail.
2. The stored value on card supports offline transaction across all travel needs with minimal financial risk to involved stakeholders. The service area feature of this card supports operator specific applications e.g. monthly passes, season tickets etc.

3. Ministry of Housing & Urban Affairs brought to the fore the National Common Mobility Card (NCMC) to enable seamless travel by different metros and other transport systems across the country besides retail shopping and purchases.

#### Background

1. Various initiatives have been taken by transit operators to automate & digitize the fare collection using Automatic Fare Collection System (AFC).
2. The introduction of closed loop cards issued by these operators helped to digitize the fare collection to a significant extent. However, the restricted usability of these payment instruments limits the digital adoption by customers.
3. AFC System (gates, readers/validators, backend infrastructure etc.) is the core of any transit operator to automate the fare collection process.
4. The major challenge associated with AFC system implementation in India till now is the lack of indigenous solution provider. Till now, AFC systems deployed at various Metros are from foreign players. In order to avoid the vendor lock-in and create an interoperable system, there was a need to develop indigenous standards and AFC system under Make in India initiative.
5. In order to ensure a seamless travel across metros and other transport systems in addition to retail shopping and purchases, the Ministry of Housing & Urban Affairs (MoHUA) came out with the National Common Mobility Card (NCMC) Program.
6. A committee was formed with representatives from National Informatics Centre (NIC), Centre for Development of Advance Computing (C-DAC), Bureau of Indian Standards (BIS), National Payment Corporation of India (NPCI) and the Ministry of Finance with an objective to develop the vendor agnostic interoperable ecosystem for NCMC including indigenous AFC System and banking interface.
7. NPCI was given the mandate to develop the specifications for card & terminal to support the NCMC ecosystem. Based on the best global practices and dynamics of Indian market, the committee recommended EMV based Open Loop Card with stored value as NCMC
8. The Gate & Reader prototype has been made by BEL. This is the first gate and the reader which has been manufactured by an Indian company.
9. This is also the first indigenous payment reader which has been certified as per International standards. India joins the very few elite nations who have indigenous capacity on gate and reader production.
10. NCMC Ecosystem offers the value proposition for customers as they need not to carry multiple cards for different usage. Further, the super quick contactless transactions will improve the seamless experience. For operators, NCMC ecosystem brings common standards for implementation without vendor lock-in.

#### CENTRE ALLOWS PUTTING ENEMY PROPERTIES TO 'PUBLIC USE'

The Centre has allowed state governments to put to "public use" some enemy properties that were left behind by people who migrated to Pakistan since the Partition and to China after the 1962 Sino-Indian war. The move comes amid the central government's efforts to sell more than 9,400 enemy properties, worth over Rs 1 lakh crore, and Rs 3,000 crore worth of enemy shares. The guidelines for disposal of the Enemy Property Order, 2018, have been amended to facilitate "usages of enemy property by the state government exclusively for public use", according to a notification issued by the Home Ministry.

#### What

1. Enemy properties are those properties that were left behind by the people who took citizenship of Pakistan and China. There are 9,280 such properties left

- behind by Pakistani nationals and 126 by Chinese nationals, an official of the ministry said.
2. Of the total properties left behind by those who took Pakistani citizenship, 4,991 are located in Uttar Pradesh, the highest in the country. West Bengal has 2,735 such estates and Delhi 487.
  3. The highest number of properties left by Chinese nationals is in Meghalaya (57). West Bengal has 29 such properties and Assam seven.
  4. The estimated value of all enemy properties is approximately Rs 1 lakh crore. The central government last month had constituted a high-level committee to recommend the quantum and price or price band for sale of enemy shares, worth Rs 3,000 crore.
  5. A total 6,50,75,877 shares in 996 companies of 20,323 shareholders are under the custody of the Custodian of Enemy Property for India, another official said.
  6. Of these companies, 588 are functional or active companies, 139 of these are listed and the remaining are unlisted.
  7. The Enemy Property Act was enacted in 1968 and it regulates such properties and lists the custodian's powers.
  8. The act was amended in 2017 to ensure that the successors of those who migrated to Pakistan and China will have no claim over the properties left behind in India.

## INDIA'S NEW DIRECT TAX CODE GETS LONGER

A task force set up under the CBDT to draft a new direct tax law and replace the existing Income Tax Act has been given a three-month extension till May, an official order said. The current term of the task force expired on February 28 and the panel under Central Board of Direct Taxes (CBDT) member Akhilesh Ranjan sought an extension citing operational reasons and requirements to firm up a final report.

What

1. The task force shall now be required to submit its report by May 31, 2019.
2. It was first set up in November, 2017 under the Central Board of Direct Taxes, that frames policy for the Income Tax Department. The CBDT functions under the Union Finance Ministry.
3. Prime Minister Narendra Modi, during the annual conference of tax officers in September 2017, had observed that the Income Tax Act, 1961, was more than 50 years ago and it needs to be redrafted.
4. The task force was assigned to draft direct tax laws in line with norms prevalent in other countries, incorporating international best practices, and keeping in mind the economic needs of the country and related matters.

## AM ALLOWED OF CPSE STRATEGIC SALE

To fast-track strategic sale of CPSEs, the Cabinet 7 March 2019 allowed Alternative Mechanism (AM) to decide on the timing, price and quantum of shares of a state-run company to be put on the block for outright sale. The CCEA (Cabinet Committee on Economic Affairs) has approved delegation of the following Alternative Mechanism in all the cases of strategic disinvestment of CPSEs where CCEA has given 'in principle' approval for strategic disinvestment,.

What

1. The Alternative Mechanism (AM) on strategic disinvestment consists of the Finance Minister, Minister for Road Transport and Highways and minister

- representing respective administrative department, to decide on the matters relating to terms and conditions of the sale.
2. The CCEA, headed by Prime Minister Narendra Modi, decided to allow the Alternative Mechanism to decide on the quantum of shares to be transacted, mode of sale and final pricing of the transaction or lay down the principles/guidelines for such pricing, and the selection of strategic partner/buyer, terms and conditions of sale.
  3. The AM will also decide on the proposals of the Core Group of Secretaries on Disinvestment with regard to the timing, price, the terms and conditions of sale and any other related issue to the transaction.
  4. This will facilitate quick decision-making and obviate the need for multiple instances of approval by CCEA for the same CPSE.

## SCIENCE AND TECHNOLOGY

### DRDO DEVELOPS 'COMBAT DRUGS'

With 90 per cent of gravely wounded security personnel succumbing to injuries within a few hours, DRDO's medical laboratory has come up with a range of 'combat casualty drugs' that can extend the golden hour till the trooper is shifted to hospital. The spectrum includes bleeding wound sealants, super absorptive dressings and glycerated salines, all of which can save lives in the event of warfare in jungle and high altitude areas as well as in terror attacks. Citing the February 14 terror attack in Pulwama where 40 CRPF soldiers were killed, they said the medicines could have brought down the death toll.

What

1. According to developers of the drugs at the Institute of Nuclear Medicine and Allied Sciences, a laboratory of the Defence Research and Development Organisation, chances of survival and minimum disability are highest when effective first aid care is given within the golden hour.
2. Scientists at INMAS, entrusted with research and development in a number of areas concerning the defence sector, said the main battlefield emergencies are excess bleeding, sepsis, shock, hypovolemia (decreased blood volume) and pain.
3. DRDO's indigenously made medicines will be a boon for paramilitary and defence personnel during warfare, said A K Singh, director general of life sciences at the organisation.
4. These medicines will ensure that our brave soldiers do not suffer from unwanted blood loss while being taken to a better healthcare from war zones.
5. The challenges are many. There is only one medical person and limited equipment to take care of soldiers during combat in most cases. This is compounded by battlefield conditions such as forests, hilly terrain and inaccessibility of vehicles, experts said.
6. Among the drugs developed is glycerated saline, a battlefield intravenous fluid that does not freeze till -18 degrees Celsius and is useful in handling trauma cases in high altitude areas.
7. Glycerated saline has life saving capacities as it gives more time to the medical personnel to shift the wounded patient to a higher care facility.
8. It is safer and more effective to put in a long stuffed absorptive strip rather than individual gauze pieces. It has four-five times higher capacity to absorb blood.
9. Then there is Chitosan gel, which helps in preventing blood loss by forming a film over the wound. Coupled with platelets and red blood cells aggregation, it

- stops the bleeding. Its antibacterial and wound health properties are of added benefit.
10. Chitosan gel is suitable for sealing wounds by twin action: haemostasis by chemical action and filling action. It can be used for wounds on the limbs and also cavities such as abdomen and thorax.
  11. Part of the range is hypochlorous acid (HOCL), a disinfectant for troopers involved in jungle warfare.
  12. It is helpful in treating necrotising fasciitis, a rapidly progressing bacterial infection of soft tissues. Bacterial toxins cause local tissue damage and necrosis, as well as blunt immune system responses.
  13. In such cases, pure 0.01 per cent HoCL has both broad-spectrum antimicrobial activity and can rapidly neutralise bacterial toxins.
  14. NMAS scientists have also discovered a new route for administering the Nalbuphine injection to reduce pain during mutilating war injuries.
  15. The scientists have discovered that 10 mg injection of Nalbuphine hydrochloride is more effective for an injured trooper if it is given through the submental/sublingual route instead of intra-muscular or intravenous route.

## NEW SPECIES FOUND IN WESTERN GHATS

**A 'secretive' new species of orange-bellied frog** with a brown back, covered in tiny spots that resemble a starry sky, has been discovered in Western Ghats mountain range, one of the **world's biodiversity hotspots**, scientists said. The thumbnail-sized species was named *Astrobatrachus kurichiyana* for its constellation-like markings and the indigenous people of Kurichiyarmala, the hill range where it was found, according to the study published in the journal PeerJ. However, *A kurichiyana* is not only a new species to science.

What

1. It is the sole member of an ancient lineage, a long branch on the frog tree of life that researchers have classified as a new subfamily, *Astrobatrachinae*.
2. This is an oddball frog — it has no close sister species for maybe tens of millions of years,” said David Blackburn, the associate curator of herpetology at the Florida Museum of Natural History in the US.
3. With frogs, there are still ancient lineages out there awaiting discovery. This gives us one more puzzle piece to think about deep time,” Blackburn said in a statement.
4. Dark brown with a bright orange underbelly and speckled with pale blue dots, the frog camouflages well in wet leaf litter, and only a few individuals have been found.
5. The colouration was the first thing that stood out to me, these starry patterns with a blue tinge, said Seenapuram Palaniswamy Vijayakumar, lead author of the species description and now a postdoctoral fellow at George Washington University in the US.

### Flashback

1. Western Ghats also known as Sahyadri (Benevolent Mountains) is a mountain range that covers an area of 140,000 km<sup>2</sup> in a stretch of 1,600 km parallel to the western coast of the Indian peninsula, traverse the States of Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra and Gujarat.
2. It is a UNESCO World Heritage Site and is one of the eight "hottest hot-spots" of biological diversity in the world.
3. It is sometimes called the Great Escarpment of India.

6. However, the starry dwarf frog nearly got overlooked in the crush of new species that Vijayakumar and his then-doctoral supervisor Kartik Shanker were finding on a series of expeditions to the Western Ghats, a 1,600-kilometres-long **mountain range along India's southwestern coast.**

## REPORT ON THE PLANET'S PARLOUS STATE

A quarter of all premature deaths and diseases worldwide are due to manmade pollution and environmental damage, the United Nations said on 13 March 2019 in a landmark report on the planet's parlous state in Nairobi. Deadly smog-including emissions, chemicals polluting drinking water, and the accelerating destruction of ecosystems crucial to the livelihoods of billions of people are driving a worldwide epidemic that hampers the global economy, it warned.

What

1. The Global Environment Outlook (GEO) -- a report six years in the making compiled by 250 scientists from 70 nations -- depicts a growing chasm between rich and poor countries as rampant over consumption, pollution and food waste in the developed world leads to hunger, poverty and disease elsewhere.
2. As greenhouse gas emissions continue to rise amid a preponderance of droughts, floods and superstorms made worse by climbing sea levels, there is a growing political consensus that climate change poses a future risk to billions.
3. World leaders in 2015 came up with the Paris climate deal, which saw each nation promise action to cut emissions in a bid to limit global temperature rises to 1.5C (2.7 Fahrenheit). But the health impacts of pollution, deforestation and the mechanised food-chain are less well understood. Nor is there any international agreement for the environment close to covering what the Paris accord does for climate.
4. It said that poor environmental conditions "cause approximately 25 percent of global disease and mortality" -- around 9 million deaths in 2015 alone.
5. Lacking access to clean drinking supplies, 1.4 million people die each year from preventable diseases such as diarrhoea and parasites linked to pathogen-riddled water and poor sanitation.
6. Chemicals pumped into the seas cause "potentially multi-generational" adverse health effects, and land degradation through mega-farming and deforestation occurs in areas of Earth home to 3.2 billion people. The report says air pollution causes 6-7 million early deaths annually.
7. And the way Earth is set, unchecked use of antibiotics in food production will see drug-resistant superbugs become the world's number one cause of premature death by mid-century.
8. The report called for a root-and-branch detoxifying of human behaviour, while insisting that the situation is not unassailable.
9. For instance food waste, which accounts for 9 percent of global greenhouse gas emissions, could be slashed. The world currently throws away a third of all food produced. That figure is fuelled by 56 percent of food in richer nations going to waste.
10. The report also called for a rapid drawdown in greenhouse gas emissions and pesticide use to improve air and water quality. The GEO draws on hundreds of data sources to calculate the environmental impact on over a 100 diseases.
11. Its unveiling at the UN Environment Assembly in Nairobi is likely to add to the debate over who bears the greatest responsibility for the damage already borne by Earth.

## CLIMATE CHANGE VULNERABILITY ASSESSMENT

Indian Institutes of Technology (IITs)-Guwahati and Mandi and Indian Institute of Science Bengaluru **have collaborated to develop** a 'Climate Change Vulnerability Assessment for the Indian Himalayan Region Using a Common Framework'. The assessment exercise is being undertaken to cover all the 12 Indian Himalayan region (IHR) states using a common framework.

What

1. Comparable vulnerability assessments are useful for the government officials, implementers, decision makers, funding agencies and development experts, according to a release shared by IIT Mandi.
2. The 12 states include Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, Arunachal Pradesh, Sikkim, the hilly districts of West Bengal, Himachal Pradesh, Uttarakhand, Jammu and Kashmir.
3. The various research projects undertaken by IIT Mandi address this vulnerability, hazard and extreme events in the Indian Himalayan Region.

Indian Himalayan Region (IHR)

1. The Himalayan states include 10 hill states- Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya, and two partial hill states, namely Assam and West Bengal.
2. The Indian Himalayan Region (IHR) with geographical coverage of over 5.3 lakh kilometre square, extends over 2,500 kilometres in length between the Indus and the Brahmaputra river systems.
3. The IHR physiographically, starting from the foothills in the south (Siwaliks), extends up to Tibetan plateau in the north (Trans-Himalaya).
4. Three major geographical entities, the Himadri (Greater Himalaya), Himanchal (Lesser Himalaya) and the Siwaliks (Outer Himalaya), extending almost uninterrupted throughout its length, are separated by major geological fault lines.

## MOST ACCURATE VALUE OF PI

**Google's Emma Haruka Iwao** and team has broken a Guinness World Record by successfully calculating the most accurate value of pi ever. Emma, who is a Cloud Developer Advocate at Google also put out a blog post on March 14 (3.14), which is celebrated as Pi Day. Pi, which is an irrational number with infinite decimals and is often rounded to 3.14, represents the **ratio between a circle's circumference and its diameter**. It is significantly used in geometrical calculations.

What

1. Emma said in the post that pi has been computed to 31.4 trillion decimal places or 31,415,926,535,897 digits to be exact, using Google Compute Engine, powered by Google Cloud.
2. This is almost 9 trillion digits more than the previous world record, which was set in November 2016 by Peter Trueb.
3. The value of pi was calculated using the y-cruncher application on 25 Google Cloud virtual machines and required a whopping 170 terabytes of data to complete.
4. To celebrate Guinness World Record day, we take a look at some of the most recent eye-catching Guinness World Records.
5. The calculations took around four months (121 days) to complete and computed digits are now the published by Google Cloud as disk snapshots, which are

available to anyone. During the entire time it took for calculations, the Google Cloud server were kept switched on to avoid any interruptions.

6. This year marks the 31st anniversary of Pi Day, which is believed to be celebrated first by physicist Larry Shaw and his peers at the Exploratorium in San Francisco in 1988.
7. For the sixth consecutive year, NASA has announced its Pi Day Challenge 2019 that invites its scientists and engineers to solve four problems by using pi.

## WEST NILE VIRUS

A section of the media has reported that a seven year old boy from Malappuram District of Kerala is suffering from a West Nile Virus (WNV), a mosquito-borne disease, mostly reported in the continental United States. Union Minister of Health and Family Welfare are closely monitoring the situation and has reviewed it with Secretary (HFW) Ms. Preeti Sudan. He has directed for all support to be extended to Kerala in its prevention and management.

What

1. Secretary (HFW) held a meeting with Additional Chief Secretary Shri Rajeev Sadanandan, Kerala and reviewed the situation. The Health Ministry has dispatched a multi-disciplinary Central team from National Centre for Disease Control (NCDC).
2. West Nile virus can cause a fatal neurological disease in humans.
3. However, approximately 80% of people who are infected will not show any symptoms.
4. West Nile virus is mainly transmitted to people through the bites of infected mosquitoes.
5. The virus can cause severe disease and death in horses.
6. Vaccines are available for use in horses but not yet available for people.
7. Birds are the natural hosts of West Nile virus.
8. West Nile Virus (WNV) was first isolated in a woman in the West Nile district of Uganda in 1937. It was identified in birds (crows and columbiformes) in Nile delta region in 1953.

## NEW EXPERIMENTS TO SEARCH FOR DARK MATTER

**CERN, which hosts the world's largest and most powerful particle accelerator**, is planning a new experiment to look for particles associated with the mysterious dark matter which makes up about 27% of the universe, the European Physics lab said. The European Organisation for Nuclear Research (CERN) announced on March 5 that it has approved the experiment designed to look for light and weakly interacting particles at the Large Hadron Collider (LHC) — a giant lab in a 27-kilometre tunnel straddling the French-Swiss border.

What

1. FASER, or the Forward Search Experiment, **will complement CERN's** ongoing physics programme, extending its discovery potential to several new particles, the lab said.
2. Some of these sought-after particles are associated with dark matter, which is a hypothesised kind of matter that does not interact with the electromagnetic force and consequently cannot be directly detected using emitted light.
3. Astrophysical evidence shows that dark matter makes up about 27% of the universe, but it has never been observed and studied in a laboratory.

4. The magnet core of the superconducting solenoid magnet at the European Organisation for Nuclear Research (CERN)'s Large Hadron Collider (LHC) in Geneva.
5. With an expanding interest in undiscovered particles, particularly long-lived particles and dark matter, new experiments have been proposed to expand the **scientific potential of CERN's accelerator complex and infrastructure as part of** the Physics Beyond Collider (PBC) study, under whose aegis FASER operates.
6. This novel experiment helps diversify the physics programme of colliders such as the LHC, and allows us to address unanswered questions in particle physics **from a different perspective,” Mike Lamont, co-coordinator of the PBC study group, said in a statement.**

#### Collaboration of 16 institutes

1. The four main LHC detectors are not suited for detecting the light and weakly interacting particles that might be produced parallel to the beam line.
2. They may travel hundreds of metres without interacting with any material before transforming into known and detectable particles, such as electrons and positrons.
3. The exotic particles would escape the existing detectors along the current beam lines and remain undetected.
4. **The detector's total length is under five metres and its core cylindrical structure** has a radius of 10 centimetres. It will be installed in a side tunnel along an unused transfer line which links the LHC to its injector, the Super Proton Synchrotron.
5. A collaboration of 16 institutes is building the detector and will carry out the **experiments which will start taking data from LHC's Run 3 between 2021 and 2023.**
6. FASER will search for a suite of hypothesised particles including so-called **“dark photons”, particles which are associated with dark matter, neutralinos and others.**
7. It is very exciting to have FASER approved for installation at CERN. It is amazing how the collaboration has come together so quickly and we are looking forward to recording our first data when the LHC starts up again in 2021.

#### ASTRONAUTS SUCCESSFULLY REACH ISS

A Russian cosmonaut and two US astronauts arrived 15 March 2019 at the International Space Station aboard a Russian Soyuz spacecraft, five months after the failed launch of a rocket carrying two of the passengers. NASA astronaut Nick Hague and his Russian colleague Alexey Ovchinin, who both survived a dramatically aborted Soyuz launch last year, were joined on the smoothly-executed trip by NASA astronaut Christina Koch.

#### What

1. The rocket blasted off without incident from Russia's Baikonur cosmodrome in Kazakhstan and docked at the ISS less than six hours later, more than 400 kilometers (249 miles) above the Earth at 05:31 IST, a few minutes ahead of schedule.
2. During a live broadcast via high-definition cameras aboard the ISS, the mission commander Ovchinin reported that the mooring mechanism was engaged.
3. A NASA commentator then confirmed the "capture." The liftoff was closely watched after the two men's space journey was cut short in October when a technical problem with their Soyuz rocket triggered a launch abort two minutes into the flight.

4. It was the first such accident in Russia's post-Soviet history and a major setback for its once proud space industry.
5. Russia's space industry has in recent years suffered a lot of mishaps including the loss of cargo spacecraft and numerous satellites.
6. SpaceX's successful test launch to the ISS of its Dragon vehicle has challenged an eight-year monopoly on travel to the space station enjoyed by Russia ever since NASA stopped launches of the Space Shuttle.
7. The International Space Station -- a rare area of cooperation between Moscow and Washington -- has been orbiting the Earth at roughly 28,000 kilometres per hour since 1998.

#### Flashback

1. The International Space Station (ISS) is a space station, or a habitable artificial satellite in low Earth orbit.
2. Its first component was launched into orbit in 1998, with the first long-term residents arriving in November 2000.
3. It has been inhabited continuously since that date.

## MISCELLANEOUS

### FIRST RECIPIENT OF BHAGWAN MAHAVIR AHIMSA PURASKAR

Indian Air Force Wing Commander Abhinandan Varthaman will be the first recipient **of the 'Bhagwan Mahavir Ahimsa Puraskar'** instituted by the Akhil Bharatiya Digambar Jain Mahasamiti, a functionary of the organisation said 3 March 2019. Varthaman, piloting a Mig-21 Bison, shot down a Pakistan Air Force F-16 with an R-73 air-to-air missile in a dogfight on February 27 before his aircraft took a hit and he had to eject.

What

1. He was captured by Pakistan forces soon after and was released on March 1.
2. The award for the fighter pilot was announced in New Delhi by the organisation's chairperson Manidra Jain, said its Maharashtra chapter convener Paras Lohade.
3. The award, instituted this year, carries a cash prize of Rs 2.51 lakh, a memento and a citation and will be presented to Varthaman on April 17, coinciding with Mahavir Jayanti, Lohade said.

### MISSILE SYSTEMS AWARD 2019

The American Institute of Aeronautics and Astronautics (AIAA) has selected G. Satheesh Reddy, **the Secretary of India's Department of Defence R&D and Chairman of the Defence Research and Development Organisation (DRDO)** as the co-winner of the 2019 Missile Systems Award.

What

1. Dr. G. Satheesh Reddy, Chairman of the DRDO, Ministry of Defence, India, was selected for his over three decades of significant national contributions toward indigenous design, development, and deployment of diversified strategic and tactical missile systems, guided weapons, advanced avionics, and navigation technologies in India, AIAA said.
2. He is the first person outside the USA to be awarded with this prestigious award in nearly four decades, a Defence source said.
3. Dr. Reddy will share the prize with Rondell J. Wilson, a former Principal Engineering Fellow of Raytheon Missile Systems.

4. Besides developing the **country's first 1000 kg class Guided Bomb** and laid foundation for Long Range Smart Guided Weapons, he has many successes under his belt including the development of indigenous RF and IIR Seekers,
5. He is also a renowned Navigation expert and has Project Director and Technology Director, steered the design and development of indigenous Inertial Sensors, SatNav Receivers, advanced Inertial Navigation Systems for a variety of defence applications including the Ship Navigation.
6. Wilson, a former Principal Engineering Fellow of Raytheon Missile Systems in Tucson, has been selected for his exemplary technical leadership and innovation that has significantly advanced the performance and capability of the **world's premier missile defense systems**.
7. The AIAA Missile Systems Technical Committee presents the award biennially to a candidate who has demonstrated expertise in fundamental technical disciplines that has led to substantial improvement in missile systems or innovative leadership that has established an environment in which creativity in missile system technology implementation can flourish and which led to the successful completion of a major program milestone by a government agency or an industry team.

## ASIA OLYMPIC CHIEF RE-ELECTED

Sheikh Ahmad Al-Fahad Al-Sabah has been re-elected president of the Olympic Council of Asia (OCA) for an eighth term despite being embroiled in a forgery case brought by Swiss investigators. The long-serving Kuwaiti, a powerful ally of International Olympic Committee (IOC) head Thomas Bach, was re-elected unanimously at the OCA general assembly in Bangkok, the OCA has said.

What

1. An IOC member since 1992, Sheikh Ahmad stepped down from his roles in the global Olympic body in November, less than two weeks after the Public Prosecutor of Geneva submitted a forgery accusation to a criminal court against the Kuwaiti and four others.
2. Sheikh Ahmad had been head of Olympic Solidarity — the multi-million dollar IOC purse that funds sports projects globally — and the head of the Association of National Olympic Committees (ANOC).
3. Sheikh Ahmad has proclaimed his innocence and said in November that the Swiss court case had nothing to do **with "sport or corruption"**.
4. The OCA said Japanese Olympic Committee president Tsunekazu Takeda had been retained as an OCA Vice President despite being at the centre of a corruption probe brought by French financial prosecutors.
5. French investigators are probing a **multi-million dollar payment made by Japan's 2020 Olympic bidding committee** to a Singaporean consultancy and placed Takeda under formal investigation on Dec. 10, a French judicial source told Reuters in January.
6. **Takeda, a vice president on Tokyo 2020's executive board**, has also proclaimed his innocence and denied anything improper with the bid.

### Flashback

1. The Olympic Council of Asia (OCA) is a governing body of sports in Asia, currently with 45 members National Olympic Committees.
2. The current president is Sheikh Fahad Al-Sabah. The oldest NOCs are from Japan and the Philippines, recognized by the International Olympic Committee (IOC) in 1911; whereas East Timor is the newest, joining in 2003.
3. The headquarters of the OCA is located at Kuwait City.

## CRICKET INCLUDE IN ASIAN GAMES

Cricket will return to the next Asian Games at Hangzhou 2022 after the Olympic Council of Asia (OCA) added it to its sports programme for the next edition of the continental event. Cricket has struggled to grow beyond its traditional bases and was last played at the Olympics in the 1900 Paris Games. The International Cricket Council (ICC) has been pushing for the game's Olympic return with the shortest 20-over format and hopes it will find a place at the 2028 Games in Los Angeles.

What

1. The Asian Games remains the largest multi-sports event that features cricket and Guangzhou 2010 and Incheon 2014 included both men's and women's competitions.
2. Cricket was, however dropped for the Games in Jakarta-Palembang last year but was added back for Hangzhou at the OCA general assembly in Bangkok, where Sheikh Ahmad Al-Fahad Al-Sabah was re-elected president of the OCA unopposed for an eighth term.
3. Cricket made its maiden appearance in the Commonwealth Games in 1998 when the South African men's team won the gold medal in Kuala Lumpur but has not featured in the quadrennial competition since then.
4. The ICC has submitted a bid for the inclusion of women's Twenty20 in the 2022 Commonwealth Games in Birmingham.
5. The International Olympic Committee (IOC) is open to cricket's inclusion provided **all top teams compete but the Indian cricket board (BCCI), the game's richest and most influential, has been rather reluctant.**
6. The powerful BCCI fears it might lose its autonomy and be answerable to the country's Olympic committee.
7. The BCCI did not allow its teams to participate in Guangzhou and Incheon blaming a packed international schedule but the Indian Olympic Association was hopeful they would be able to convince the board for 2022.

## SWACHH SURVEKSHAN 2019

Indore was adjudged India's cleanest city for the third straight year in the central government's cleanliness survey announced on 6 March 2019. The second and third positions in the category were grabbed by Ambikapur in Chhattisgarh and Mysore in Karnataka. The Swachh Survekshan awards 2019 were conferred by President Ram Nath Kovind. While the New Delhi Municipal Council area was given the 'Cleanest Small City' award, Uttarakhand's Gauchar was adjudged the 'Best Ganga Town' in the central government survey. The 'Cleanest Big City' award has been bagged by Ahmedabad, while Raipur is the 'Fastest Moving Big City'.

What

1. Ujjain has been the adjudged the 'Cleanest Medium City' and Mathura-Vrindavan bagged the tag of the 'Fastest Moving Medium Cities'.
2. Top-ranked cities received a statue of Mahatma Gandhi as a memento for their work towards cleanliness. Swachh Survekshan 2019 covered all urban local bodies in the country, making it the largest such cleanliness survey in the world.
3. Mahatma Gandhi had played a pivotal role in spearheading the movement of cleanliness. I hope people will take inspiration from the just concluded Kumbh Mela and the level of cleanliness in it, Kovind said.
4. Urban transformation that is being attempted in the country is the most comprehensive and ambitious framework of planned urbanisation.

5. The fact that urban sanitation had never before been brought to the centre-stage spoke of the common perception that cleaning urban India was an impossible task. These states and cities have risen to that challenge.

## INTERNATIONAL WOMEN'S DAY 2019

**International Women's Day** is a celebration of all the societal, literary and political achievements by women and is celebrated every year on March 8. **Women's** Day was first observed on the 28th of February 1909, in New York. In 1910, at the **International Woman's Conference**, March 8 was finalised as the day when Women's Day would be officially commemorated. The last two years have seen a new wave in the era of **women's** rights in the form of the MeToo movement which started off in America and has made waves of change all over the world.

What

1. The day is not associated with any one group, but it brings together various organisations, companies and charities. All over the world, it is celebrated by performances, marches, talks and discussions.
2. **Women's Day is an official holiday in many countries Cuba, Armenia, Mongolia, Russia, Uganda and Ukraine. On this day, just like on Mother's Day, men present gifts to their mothers, girlfriends and wives.**
3. The theme for this year is #BalanceForBetter, with regards to the greater global push for professional and social equality.
4. **The theme's objective is to achieve a sense of balance in companies and elsewhere, right from the grassroots level to the boardrooms.**
5. The past has seen an absence of this phenomenon, but with effort and the right direction, the objective is to achieve equality in professional and social spheres.
6. The campaign runs all through the year and does not end on March 8.

## INDIA BAGS FIRST PRIZE

The Ministry of Tourism, Government of India has won the First Prize in the category of TV Cinema Spot at the prestigious international Golden City Gate Tourism Awards 2019. The awards were received by Shri YogendraTripathi, Secretary, Tourism on at ITB, Berlin being held from the 6th to 10th March 2019. Following promotional films / television commercials produced by the Ministry as part of its Incredible India 2.0 Campaign received the awards:

1. Yogi of the Racetrack
2. The Reincarnation of Mr. and Mrs. Jones
3. Sanctuary in Paris
4. Maharani of Manhattan and
5. The Masala Master Chef

What

1. The Golden City Gate Tourism Multi-media Awards are given annually in various categories related to the Tourism and Hospitality sectors.
2. **The 'Golden City Gate' is a creative multi-media international competition for countries, cities, regions and hotels. The entries received for the awards are judged by an international jury comprising film and tourism experts. The annual award ceremony takes place at ITB Berlin, the world's leading tourism trade show.**
3. The Ministry of Tourism has launched the Incredible India 2.0 Campaign in September 2017.

4. The 2.0 Campaign marks a shift from generic promotions across the world to market specific promotional plans and content creation.
5. Thematic creatives on different Niche tourism products have been produced and are being used in the Campaign, to cater to diverse consumer interests.
6. These include the above Television Commercials on Yoga, Wellness, Wildlife, Luxury and Cuisine, which have been very well received the world over, registering about 155 million views on social media.
7. The commercials have been produced in English with voice overs in 9 international languages, viz. German, French, Spanish, Italian, Russian, Chinese, Japanese, Korean and Arabic.

## RUSSIAN ARMS EXPORTS TO INDIA FELL

**Russia's arms export to India fell by a whopping 42 per cent between 2014-18 and 2009-2013**, according to a new report. As a result, Russia accounted for 58 per cent of total Indian arms imports in 2014-2018, compared with 76 per cent in 2009-2013, according to the report "Trends in International Arms Transfers, 2018" released by the Stockholm International Peace Research Institute (SIPRI). In line with Prime Minister's effort to reduce country's dependence on foreign arms, India's import of arms decreased by 24 per cent between 2009-2013 and 2014-2018, according to the figures released by the report.

What

1. **This decline in India's import is also partly due to delays in deliveries of arms** produced under license from foreign suppliers, such as combat aircraft ordered from Russia in 2001 and submarines ordered from France in 2008.
2. **Still, India was the world's second largest importer of major arms in 2014-18** and accounted for 9.5 per cent of the global total. Israel, the USA and France all increased their arms exports to India in 2014-18.
3. **Pakistan's arms imports decreased by 39 per cent between 2009-13 and 2014-18.** The US has become increasingly reluctant to provide military aid or sell arms to Pakistan: US arms exports to Pakistan fell by 81 per cent between 2009-13 and 2014-18.
4. Pakistan has instead turned to other suppliers. For example, in 2018 it ordered 4 frigates and 30 combat helicopters from Turkey.
5. **The decrease in India's arms import is significant** given that the volume of international transfers of major arms in 2014-18 was 7.8 per cent higher than in 2009-13 and 23 per cent higher than in 2004-2008.
6. The five largest exporters in 2014-18 were the United States, Russia, France, Germany and China. The five largest importers were Saudi Arabia, India, Egypt, Australia and Algeria.
7. The US was the top arms exporter in 2014-18 and 2009-13. Its exports of major arms grew by 29 per cent between the two periods and its share of total global exports rose from 30 per cent to 36 per cent. As a result, the gap between the USA and Russia – the second largest exporter – continued to widen.

### Flashback

1. Stockholm International Peace Research Institute (SIPRI) is an international institute based in Sweden, dedicated to research into conflict, armaments, arms control and disarmament.
2. Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.
3. SIPRI is based in Stockholm.

8. In 2009-13, US exports of major arms were 12 per cent higher than those of Russia, whereas in 2014-18 they were 75 per cent higher. Russian exports of major arms decreased by 17 per cent between the same periods.
9. The fall was partly due to general reductions in Indian and Venezuelan arms imports – two countries that have been among the main recipients of Russian arms exports in previous years, the SIPRI said.
10. Although India remained the chief recipient of Russian arms in 2014-18, Russian arms exports to India fell by 42 per cent between 2014-18 and 2009-13.
11. Arms exports to Venezuela, which was the fifth largest recipient of Russian arms in 2009-13, decreased by 96 per cent between the two periods.

## NEW DIRECTOR OF BARC

Dr. A.K. Mohanty, distinguished Scientist and Director, physics group of the Bhabha Atomic Research Centre (BARC) and Director, Saha Institute of Nuclear Physics, Kolkata on 12 March 2019 took over as Director, BARC from Shri K.N. Vyas, Chairman, Atomic Energy Commission and Secretary to the Government of India, Department of Atomic Energy.

What

1. Dr. Mohanty graduated from the 26th batch of the BARC Training School and joined Nuclear Physics Division of Bhabha Atomic Research Centre in 1983.
2. During the past 36 years, Dr. Mohanty has worked in several areas of nuclear physics covering collision energy from sub-Coulomb barrier to relativistic regime.
3. Dr. Mohanty is the recipient of Young Scientists Award of Indian Physical Society (1988), Young Physicist Award by Indian National Science Academy (1991) and Department of Atomic Energy Homi Bhabha Science & Technology Award (2001).
4. While taking over as Director-BARC, Dr. Mohanty has expressed gratitude towards his predecessors in Physics Group who have helped him in understanding finer nuances of low and high energy nuclear physics.
5. He also gratefully acknowledged the efforts put in by his seniors which have helped in completion of projects of national and international importance in which he could contribute, and said he is committed to continue further the work of BARC in the fields of societal importance.

### Flashback

1. Dr. Homi Jehangir Bhabha conceived the Nuclear Program in India. Dr Bhabha established the Tata Institute of Fundamental Research (TIFR) for carrying out nuclear science research in 1945.
2. To intensify the effort to exploit nuclear energy for the benefit of the nation, Dr Bhabha established the Atomic Energy Establishment, Trombay (AEET) in January 1954 for multidisciplinary research program essential for the ambitious nuclear program of India.
3. After the sad demise of Bhabha in 1966, AEET was renamed Bhabha Atomic Research Centre (BARC).

## 28TH NATION TO PLAY T20I

In January 2019, the International Cricket Council (ICC) approved the inclusion of USA Cricket as an associate member of the cricketing body. The country became **ICC's** 105th member. Now, the team will get ready to play their first ever international match on

15 March 2019 as they face off against the United Arab Emirates at the ICC Academy Ground in Dubai. Doing so, the USA will become the 28th nation in the world to play a T20I match.

What

1. USA head coach Pubudu Dassanayake expressed hope that the two-match T20I series against UAE could provide a platform for his side to have a successful T20I World Cup qualifying campaign later this year.
2. **It's the first T20 International USA** is playing, so we want to win, so winning is important. But having said **that, at the end of this year there's a big tournament coming up, the T20 global qualifier and regional qualifiers.**
3. So we want to see what is our best combination and best players for that **version. We're going to try a few combinations and the day after and see what's best for us.**
4. The United Arab Emirates will host United States of America in the historic T20I at the ICC Academy in Dubai.

#### Flashback

1. The International Cricket Council (ICC) is the global governing body of cricket.
2. It was founded as the Imperial Cricket Conference in 1909 by representatives from Australia, England and South Africa.
3. It was renamed as the International Cricket Conference in 1965, and took up its current name in 1989.