My Notes....

NATIONAL

NATIONAL REDD+ STRATEGY RELEASED

Reiterating India's commitment to Paris Agreement on Climate Change, Union Minister for Environment, Forest and Climate Change, Dr. Harsh Vardhan has **emphasised that the cooperation and involvement of the tribals**, other **forest dwelling people** and the society as a whole, is crucial for the implementation of the **REDD+ strategy**.

What

1. The Minister stated that **the well-being of our forests is essential for a healthy living environment in the country**. The Minister further emphasized that **REDD+ activities will help in sustainable livelihood of local communities** and also in conservation of biodiversity.

2. He also acknowledged **the efforts put in for coordinating the preparation of this document**. The Minister stated that **India's National REDD+ strategy is one of the tools to achieve India's commitment to Paris Agreement**.

3. **REDD+ strategy will help the country to fulfill its NDC commitments** and will also contribute to the livelihood of the forest dependent population.

4. **In simple terms, REDD+ means "Reducing Emissions from Deforestation and forest Degradation**", conservation of forest carbon stocks, sustainable management of forests, and **enhancement of forest carbon stocks in developing countries**.

   The Paris Climate conference (COP 21)
   The purpose of this Agreement is to

   PARIS2015
   COP21-CMP11

   * To hold the increase in the global average temperature to

     ❖ Option 1: below 2 °C above pre-industrial levels,
     ❖ Option 2: well below 2°C above pre-industrial levels [and to [rapidly] scale up global efforts to limit temperature increase to below 1.5 °C]
     ❖ Option 3: below 1.5°C above pre-industrial levels

   * To increase the ability developing countries to adapt to the adverse impacts of climate change

5. REDD+ aims to achieve climate change mitigation by **incentivizing forest conservation**.

6. The strategy seeks to address drivers of deforestation and forest degradation and also developing a **roadmap for enhancement of forest carbon stocks** and **achieving sustainable management of forests through REDD+ actions**. The National REDD+ Strategy will soon be communicated to the UNFCCC.

7. **Paris agreement on climate change also recognizes role of forests in climate change mitigation** and calls upon country Parties to take action to implement and support REDD+.

8. **India has communicated in its Nationally Determined Contribution under Paris Agreement** that **it will capture 2.5 to 3 billion tonnes of Carbon dioxide** through additional forest and tree cover by 2030.

9. **India's first biennial update report to UNFCCC has revealed that forests in India capture about 12% of India's total GHG emissions**. Thus, forestry sector in India is making a positive cost effective contribution for climate change mitigation.

10. Complying with the UNFCCC decisions on REDD+, India has prepared its National REDD+ Strategy. **The Strategy builds upon existing national circumstances** which have been updated in line with **India's National Action Plan on Climate Change**, **Green India Mission** and **India's Nationally Determined Contribution (NDC) to UNFCCC**.

11TH WORLD HINDI CONFERENCE

The 11th World Hindi Conference, an event aimed at **expanding the reach of the Hindi language at a global level**, begins in **Mauritius** from 18 August 2018. Mauritius Prime Minister Praveen Kumar Jagannath inaugurate the conference in **Port Louis**. External Affairs Minister Sushma Swaraj and other ministers are also reaching Port Louis to attend the event. This year the theme of the conference is "**Hindi World and Indian Culture**".

What

1. **For the first time,** a special flight was also arranged for official delegates. Around 290 delegates have already arrived at **Port Louis** on 17 August 2018.
2. This is also the **first time that representatives from all 29 states and Union Territories of Delhi, Chandigarh and Puducherry** will be attending the conference.
3. The delegates from India and various countries of the world will deliberate on eight subtopics on Hindi World and Indian Culture during the three-day conference.
4. The decision to organise the 11th edition of the Conference in **Mauritius** was taken at the **10th World Hindi Conference held in Bhopal,** India in September 2015.
5. **The first World Hindi Conference** was held in 1975 in Nagpur, India. Since then, **ten such Conferences** have been held in different parts of the world.

Previous ten Conferences

1. **First World Hindi Conference Nagpur**, India 10-12 January, 1975
2. Second World Hindi Conference Port Louis, Mauritius 28-30 August, 1976
3. **Third World Hindi Conference New Delhi**, India 28-30 October, 1983
4. **Fourth World Hindi Conference Port Louis, Mauritius 02-04 December, 1993**
5. Fifth World Hindi Conference Port of Spain, Trinidad and Tobago 04-08 April, 1996
6. Sixth World Hindi Conference London, UK 14-18 September,1999
7. Seventh World Hindi Conference Paramaribo, Suriname 06-09 June, 2003

> **Flashpoint**
> 1. **Hindi (Devanagari Script)** is one of the main languages of India and is spoken by around 40 per cent of the Indian population.
> 2. **Hindi language in India has a big history** which belongs to the **Indo-Aryan branch of the Indo-European language family.**
> 3. It is used in many countries of the world including **Mauritius, Pakistan, Surinam, Trinidad** and some other countries.
> 4. It is known as the **4th largest language of the world**.

8. Eighth World Hindi Conference New York, America 13-15 July, 2007
9. Ninth World Hindi Conference Johannesburg, South Africa 22-24 September, 2012
10. **Tenth World Hindi Conference Bhopal, India 10-12 September, 2015**

National Hindi Diwas

1. **National Hindi Divas (Hindi Day) was observed** every year across India on **14 September** to promote **Hindi as Matra Bhasha (mother tongue) of India** and to propagate Hindi language and its cultural heritage and values.
2. The day is marked by literary festivals, Hindi poetry sessions, Hindi essay writing competitions, Hindi speech contests and other events.

3. The day marks the adaptation of Hindi language as the official language of India by **the Constituent Assembly of India on 14 September 1949**.

4. The decision of using Hindi as official language was ratified by **Indian Constitution via amendment 343** which stated that all government communications will be penned in Hindi (Devanagari Script). This amendment came into effect on 26 January 1950.

5. Presently, **there are 2 official languages- Hindi and English**.

O-SMART APPROVED

The Cabinet Committee on Economic Affairs, chaired by the Prime Minister Shri Narendra Modi has given its approval for the umbrella scheme "**Ocean Services, Technology, Observations, Resources Modelling and Science (O-SMART)**", for implementation during the **period from 2017-18 to 2019-20** at an overall cost of Rs.1623 crore. **The scheme encompasses a total of 16 sub-projects** addressing ocean development activities such as **Services, Technology, Resources, Observations and Science**.

Impact of this Scheme

1. **The services rendered under the O-SMART will provide economic benefits to a number of user communities** in the coastal and ocean sectors, namely, **fisheries, offshore industry, coastal states, Defence, Shipping and Ports** etc.

2. Currently, five lakhs fishermen community are receiving this information daily through mobile which includes allocation of fish potential and local weather conditions in the coastal waters. This will help in reducing the search time for fishermen resulting savings in the fuel cost.

3. **Implementation of O-SMART will help in addressing issues relating to Sustainable Development Goal-14**, which aims to conserve use of oceans, marine resources for sustainable development.

4. This scheme (O-SMART) also provides necessary scientific and **technological background required for implementation of various aspects of Blue Economy**.

5. The State of Art Early Warning Systems established under the O-SMART Scheme will help in **effectively dealing with ocean disasters like Tsunami, storm surges**.

6. The technologies being developed under this Scheme will help in harnessing the vast ocean resources of both living and non-living resources from the seas around India.

What

1. **Recognizing the importance of implementing schemes of highly multi-disciplinary in the ocean sector of national interests** and international commitments, the ministry is proposing to continue the e**xisting schemes in a focused way as a part of umbrella scheme of (O-SMART)**.

2. As the resources on land are not adequate enough to meet the future demands, India is also embarking on blue economy for effective and efficient use of the vast ocean resources in a sustainable way, which would require a great deal of information on ocean science, development of technology and providing services.

3. Further, **the coastal research and marine biodiversity activities are important to be continued** also in the context of achieving **United Nations Sustainable Development Goal-14** to **conserve and sustainably use the oceans, seas and marine resources for sustainable development**.

4. **This has been envisaged under the (O-SMART) scheme**. The ocean advisory services and technologies being rendered and developed under the scheme play a pivotal role in the development activities over dozen sectors, working in the marine environment including the coastal states of India, contributing significantly to the GDP.

5. Besides, the state-of-the art early warning systems setup for oceanic disasters viz., Tsunami, storm surges, are also providing round the clock services for India and countries of the Indian Ocean, which have been **recognized by UNESCO**.

The important deliverables during the next 2 years envisage include
1. **Strengthening of Ocean Observations and Modelling**
2. Strengthening of Ocean Services for Fishermen
3. Setting up Marine Coastal Observatories for **monitoring marine pollution in 2018**
4. Setting up **Ocean Thermal Energy Conversion Plant (OTEC) in Kavaratti**
5. Acquisition of 2 Coastal Research Vessels for Coastal research
6. Continuation of Ocean Survey and Exploration of Minerals and Living Resources
7. Technology Development for Deep Ocean Mining- Deep Mining System and Manned Submersibles
8. Setting up Six Desalination Plants in Lakshadweep

Flashback
1. In accordance of the **Ocean Policy Statement enacted in November 1982**, the Ministry has been implementing a number of multi-disciplinary projects in the field of ocean development primarily to (i) **provide a suite of Ocean Information services**, (ii) **develop technology for sustainable harnessing the ocean resources**, (iii) **promote front-ranking research** and (iv) **Conduct ocean scientific ocean surveys**.
2. The programs/policies of Ministry of Earth Sciences (MoES) are being pursued through its autonomous institutes, viz. National Institute of Ocean Technology, Indian National Centre for Ocean Information Services, National Centre for Antarctic and Ocean Research, and attached offices, Centre for Marine Living Resources and Ecology, National Centre for Coastal Research and other national institutes. A fleet of research vessels viz., Technology Demonstration vessel SagarNidhi, Oceanographic Research Vessel SagarKanya, Fisheries and Oceanographic Research Vessel SagarSampada and Coastal Research Vessel SagarPurvi has been acquired to provide required research support.
3. During the period, **several major milestones under various programs have been accomplished** which include according pioneer status on deep-sea mining of **Poly-Metallic Nodules [PMN] in an area of 75,000 square kilometers in the Central Indian Ocean [CIO]** allotted by International **Sea Bed Authority [ISBA]** for exploration of PMN, allotment of 10,000 sq.km in the Indian Ocean for exploration of **hydrothermal sulphides**.
4. **India's ocean related activities are now extended from the Arctic to the Antarctic region covering large ocean spaces** which have been monitored through a wide spectrum of in situ and satellite-based observations.
5. India has also established a state-of-the art early warning systems for ocean disasters, viz, tsunami, cyclones, storm surges etc.
6. India had also **signed the Antarctic Treaty System and joined Commission of Conservation of Antarctic Marine Living Resources (CCAMLR)** for harnessing the resources.

NOTA VOTING OPTION CAN'T BE PERMITTED IN RS

The Supreme Court on 21 August 2018 said the **option of none of the above (NOTA)** cannot be permitted in Rajya Sabha (RS) elections. A bench of Chief Justice Dipak Misra and justices A M Khanwilkar and D Y Chandrachud has set aside the Election Commission's notification **allowing NOTA option in the ballot papers for Rajya Sabha polls**. The apex court had questioned the poll panel's notification and said that NOTA was meant to be exercised by individual voters in direct polls.

What

1. **The verdict came on a plea of Shailesh Manubhai Parmar**, who was the Congress's chief whip in the Gujarat assembly during the last Rajya Sabha polls, in which the party had fielded sitting MP Ahmed Patel.

2. Parmar had challenged the poll panel's notification **allowing the NOTA option in ballot papers**.

3. The top court had earlier said by introducing NOTA, the poll panel was legitimising the act of not voting.

4. The Gujarat Congress leader had alleged that if the NOTA provision was allowed in the Rajya Sabha polls, **it would encourage "horse-trading and corruption"**.

5. The poll panel had said **NOTA was first introduced in 2014 following an apex court verdict a year earlier** and they (the Congress) did not have any objection in subsequent polls as it suited them.

> **Flashback**
>
> 1. The Supreme Court, in September 2013, **upheld the right of voters to reject all candidates contesting the elections**, saying it would go a long way in cleansing the political system of the country.
>
> 2. The apex court directed the Election Commission to have an **option of 'None Of The Above' (NOTA)** on the electronic voting machines (EVMs) and ballot papers in a major electoral reform.
>
> 3. **Before the NOTA option came in existence**, people casting negative votes were required to enter their names in a register and cast their vote on a separate paper ballot.
>
> 4. **Under Section 49 (O) of the Conduct of Elections Rules, 1961**, a voter **could enter his electoral serial number in Form 17A and cast a negative vote**.
>
> 5. The presiding officer would then put a remark in the form and get it signed by the voter. This was done to prevent fraud or misuse of votes.
>
> 6. **This provision was, however, deemed unconstitutional by the SC as it did not protect the identity of the voter**.

SIH 2019 LAUNCHED

The **third edition of World's Biggest Open Innovation Model - Smart India Hackathon 2019 was launched** by the Union Minister for Human Resource Development, Shri Prakash Javadekar in New Delhi on 29 August 2018. **MHRD, AICTE, Persistent Systems and i4c** have joined hands **to make a hat trick** with their highly popular and innovative **Smart India Hackathon initiative (SIH)**.

What

1. **SIH-2019 is a nationwide initiative to provide students a platform to solve some of pressing problems** we face in our daily lives, and thus inculcate a culture of product innovation and a mindset of problem solving.

2. **This new edition of SIH-2019 over 1 Lakh+ students from around 3000 institutions** will have the opportunity to work on challenges faced within the Public Sector Organizations and the Union Ministries. **And for the 1st time, it will also include problem statements from industry as well as NGOs**.

3. **Students would get a chance to create world class solutions** for some of the top organizations in the world, it would also be a chance for organizations to meet the brightest young minds and brand themselves from hiring perspective.

4. The students from **IISc, IITs, NITs and AICTE/UGC** approved institutions will also compete to creatively solve problems and offer technical solutions.

5. **Smart India Hackathon- 2019 would also have 2 sub-editions** – **Software edition** (a 36-hour software product development competition) and **Hardware edition** (a 5 days long hardware product development competition).

6. Public/ Private sector organizations and NGOs may join SIH2019 to get innovative solutions to their problems in cost effective ways.

KSG – **(DELHI VN)** 9717380832, **(DELHI RN)** 9811293743, **(JAIPUR)** 8290800441, **(BHOPAL)** 7509975361, **(PATNA)** 7463950774, **(INDORE)** 9893772941, **www.ksgindia.com**

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Some more benefits to join SIH are as follows:

1. Opportunity to brand your organization nationally
2. Recognition and visibility for your organization across all technical institutions in India
3. Young techies from all over the country offer out-of-the-box solutions to your problems
4. Be part of World's biggest Open Innovation Movement
5. Opportunity to work with some of the best talent in the country
6. Technology Students across India compete to creatively solve problems and offer technical solutions

Flashpoint

1. **Smart India Hackathon 2017 saw problem statements coming from 29 union ministries of India**. Out of the top ideas from this edition, **20 projects were mentored** and creatively developed. They are now ready for handover to the concerned ministries and deployment.
2. **Smart India Hackathon 2018 involved 27 union ministries and 17 state governments** and for the **first time introduced a special Hardware edition**.
3. The ministries are now in the process of shortlisting some of the best ideas from the 200+ winning teams (under both software and hardware editions) and the process of mentoring and developing full-fledged solutions will soon be kick started.

7. Harness expertise of lakhs of students from IISc, IITs, NITs and AICTE/UGC approved institutions

GLOBAL LIVEABILITY INDEX 2018

Both political and financial capitals of India have **fared poorly on the Global Liveability Index, 2018**, with **Delhi ranking 112** and **Mumbai five places behind at 117**. The rankings of **140 global cities, based on their living conditions** were released by the **Economist Intelligence Unit (EIU)**. The EIU is part of UK magazine The Economist and provides forecasting and advisory services through research and analysis. **Delhi and Mumbai are only two Indian cities** that are included in the EIU's annual index.

What

1. The index assigns cities scores on **five broad parameters — stability, healthcare, culture/environment, education, and infrastructure** using **30 indicators**.

2. **Delhi has outperformed Mumbai on education, healthcare and infrastructure**, while faring marginally better on culture/environment. The only parameter in which Mumbai fares better than Delhi is stability.
3. The weakest area for Delhi is its instability **due to the high prevalence of petty and violent crimes**, and a high risk of terrorism and civil unrest. It also achieves

the lowest possible ranking for public transport (an indicator within infrastructure)."

4. **Mumbai fares low in the infrastructure category**, "where it is let down by poor roads and public transport and lack of water provision and quality housing".

5. The EIU report is in contrast with the Union Ministry of Housing and Urban Affairs**' Ease of Living Index for 111 Indian cities** that was released wherein **Mumbai ranked at number 3, far ahead of New Delhi at a low 65th rank**.

6. While much of the parameters and data sources are different for the two reports, in the Union government's report, New Delhi is far behind Mumbai on parameters such as health, education and physical infrastructure.

7. **EIU, which was involved in developing the methodology to measure city GDP for the Indian government's Ease of Living report**, had nothing to do with the ranking process itself which was carried out by IPSOS Research Pvt Ltd and Athena Infonomics.

8. The rankings of both Delhi and Mumbai have slipped by two places this year even as their liveability score remained unchanged due to improvements made by other cities, the report said.

9. As per their ranking, **the liveability factor of these two Indian cities is the same as Mexico City, Jeddah, Ho Chi Minh City and Jakarta**. Even newly-developed areas (in Indian cities) are **poorly served by public transport, suffer from congestion and pollution**, and have inadequate water.

10. **Austria's capital Vienna has been ranked as the best city to live in**, **displacing Australian city of Melbourne**, which had held the record for seven consecutive years.

11. Syrian capital of Damascus continues to be ranked at the bottom of 140 cities despite the report noting that it has witnessed "a stabilisation in its dramatic decline in liveability".

12. Dhaka in Bangladesh is the second worst with **Pakistan's capital Karachi ranked as the fourth worst**.

5 THEMATIC AREAS IN HIMALAYAN REGION

Recognizing the uniqueness of the Himalayas and the challenges for sustainable development, **NITI Aayog had set up 5 Working Groups (WGs) in June 2017 to prepare a roadmap for actions in 5 thematic areas**. The themes include: **Inventory and Revival of Springs in Himalayas for Water Security**, **Sustainable Tourism in Indian Himalayan Region**, **Transformative Approach to Shifting Cultivation**, **Strengthening Skill & Entrepreneurship Landscape in Himalayas** and Data/Information for Informed Decision Making.

What

1. The reports list challenges in **all 5 thematic areas**. **Nearly 30% of springs crucial to water security of people are drying** and 50% have reported reduced discharge. **Himalayan Tourism growing annually at 6.8%** has crated huge challenge related to solid waste, water, traffic, loss of bio-cultural diversity etc.

2. With the projected arrival of tourists in IHR States to more than double by 2025, urgent actions will be needed to address critical issues of waste management and water crisis in addition to other environmental and social issues.

3. In the north eastern States, thousands of the households continue to practice slash and burn (shifting cultivation) that need to be addressed in view of ecological, food and nutritional security.

4. Predominantly unskilled workforce remains a challenge for the mountains as well that need high priority to address migration of youths. Also challenges related to data availability, data authenticity, compatibility, data quality, validation, user charges for Himalayan States need addressal for informed decision making at different levels of governance.

The key messages from reports include:

1. **Spring Mapping and Revival, using 8 steps protocol be taken up across Himalayan States in phased manner**.
2. Apply carrying capacity concept to all major tourist destinations
3. Implement and monitor tourism sector Standards and apply performance based incentives for States faring well on the standards.
4. Assessment of nature & extent of Shifting Cultivation area, improved policy coherence, strengthened tenurial security & improved access to related programs/schemes are key recommendations to transform shifting cultivation.
5. **Strengthening of skill & entrepreneurship will require focus on identified priority sectors where mountains have advantage**, investment in trainers, assessors and training centers in industry partnership.
6. Having a Central Data Management Agency for Himalayas to provide data with high fidelity scenario while addressing data sharing, access, authenticity and comparability issues will go a long way in addressing data related issues.
7. The call for actions includes setting up of a Himalayan Authority for coordinated and holistic development of entire Himalayan region and launching of "Himalaya Calling": **Awareness to Action Campaign as people'smovement**.
8. The call for actions also includes suggestions for setting up of Mission on Spring Water Management in Himalayas, National Mission/Program on Transforming Shifting Cultivation in North Eastern States, demand driven network of skill and entrepreneurship development Centers in Himalayan States, consortium of institutions of high learning for mountain specific research and technology, link with Hindukush Himalaya Monitoring and Assessment program (HIMAP) and Setting up **Central Data Management Agency for Himalayan Database at GB Pant National Institute of Himalayan Environment and Development**.

INDIA'S FIRST BIOFUEL FLIGHT

A historic flight powered by **indigenously produced aviation biofuel based on patented technology of CSIR-IIP Dehradun** was flagged off on 27 August 2018 from **Dehradun airport** by Uttarakhand CM Shri Trivendra Singh Rawat. **The Spicejet flight, featuring a latest generation Q400 aircraft powered by**, was received at Delhi airport by Union Ministers Shri Nitin Gadkari.

What

1. The genesis of this development goes back several years to an **Indo-Canadian consortium project from 2010 to 2013 involving CSIR-IIP**, Indian Oil, Hindustan Petroleum, IIT Kanpur and IISc Bangalore, in which research was directed towards the production of **Bio-aviation fuel by CSIR-IIP from jatropha oil** and its evaluation under various conditions, culminating in a detailed engine test by Pratt and Whitney in Canada that showed fitness for purpose.
2. **Spicejet - as the lead organization for the demonstration flight** - and Chhattisgarh Biofuel Development Authority- the supplier of the jatropha oil for the flight, sourced from over 500 farmers, received considerable policy and regulatory support from the MOPNG Working Group on Biofuels and the Directorate General Civil Aviation (DGCA) in making this flight happen.
3. With this maiden flight India joins the exclusive club of nations using **biofuel in aviation**.
4. **The use of bio jet fuel, apart from reducing greenhouse gas emissions by about 15 percent** and **sulfur oxides (SOx) emissions by over 99 percent**, is expected to provide indigenous jet fuel supply security, possible cost savings as feedstock availability at farm level scales up, superior engine performance and reduced maintenance cost for the airline operators.

REGULATIONS FOR DRONES ANNOUNCED

The Ministry of Civil Aviation has been working for several years to establish a **world leading drone ecosystem in India**. To that end, **it was necessary to develop global**

standard drone regulations that would permit, will appropriate safeguards, **the commercial application of various drone technologies**. The preparation of these drone regulations through a **Civil Aviation Requirement (CAR) has taken multiple years because:**

1. Drone technologies have been **evolving very rapidly**
2. Many countries are still experimenting with **their drone regulations and no ICAO stands have been developed**
3. India's security environment necessitates extra precautions.

What

1. **Instead of simply digitizing a paper-based process for registering and operating drones**, India has formulated an all-digital process.

2. **The Digital Sky Platform is the first-of-its-kind national unmanned traffic management (UTM) platform** that implements "**no permission, no takeoff" (NPNT)**.

3. **Users will be required to do a one-time registration of their drones, pilots and owners**. For every flight (exempted for the nano category), users will be required to ask for permission to fly on a mobile app and an automated process permits or denies the request instantly.

> **Key features of Drone Regulations 1.0 are:**
>
> 1. Notification of Final Regulations for Civil **Use of Remotely Piloted Aircraft System**
> 2. The Directorate General of Civil Aviation has issued today the Civil Aviation Requirements (CAR) for civil use of **Remotely Piloted Aircraft System (RPAS) commonly known as drones.**
> 3. The regulation was developed after extensive consultations among various stakeholders, and will be effective from 1st December, 2018.
> 4. As per the regulation, there are **5 categories of RPAS categorized by weight, namely nano, micro, small, medium and large**.

4. **To prevent unauthorized flights and to ensure public safety**, any drone without a digital permit to fly will simply not be able to takeoff.

5. **The UTM operates as a traffic regulator in the drone airspace** and coordinates closely with the defense and civilian air traffic controllers (ATCs) to ensure that drones remain on the approved flight paths.

6. The Union Minister of Civil Aviation Shri Suresh Prabhu announced the **Drone Regulations 1.0** . He said, these regulations will enable the safe, commercial usage of drones **starting December 1, 2018**.

7. **Drone Regulations 1.0 are intended to enable visual line-of-sight daytime-only** and a **maximum of 400 ft altitude operations**.

8. Air space has been partitioned into **Red Zone (flying not permitted)**, **Yellow Zone (controlled airspace)**, and **Green Zone (automatic permission)**.

No Drone Zones:

- **The regulation defines "No Drone Zones" around airports**;near international border, Vijay Chowk in Delhi; State Secretariat Complex in State Capitals, strategic locations/vital and military installations; etc.

Operations through Digital Platform:

1. **Operations of RPAS to be enabled through Digital Sky Platform**. The RPAS operations will be based on NPNT (No Permission, No Take off).

2. The details including links for the digital sky platform shall be available in DGCA website from 1st December, 2018.

3. There will be different colour zones visible to the applicant while applying in the digital sky platform, viz, Red Zone: flying not permitted, Yellow Zone (controlled airspace): permission required before flying, andGreen Zone (uncontrolled airspace): automatic permission.

The enforcement actions are

1. **Suspension/ cancellation of UIN/ UAOP in case of violation of regulatory provisions**
2. Actions as per **relevant Sections of the Aircraft Act 1934, or Aircraft Rules, or any statutory provisions**
3. Penalties as per applicable IPCs (such as 287, 336, 337, 338, or any relevant section of IPC).

IBC 2018 INAUGURATED

The President of India Shri Ram Nath Kovind inaugurated the "**International Buddhist Conclave (IBC), 2018**" in Delhi on 23 August 2018. The 4 days long Conclave has been organized by the **Ministry of Tourism in collaboration with the State Governments of Maharashtra, Bihar and Uttar Pradesh** from 23rd – 26th August, 2018 at New Delhi and Ajanta (Maharashtra), followed by site visits to **Rajgir, Nalanda and Bodhgaya (Bihar) and Sarnath (Uttar Pradesh)**. The President also launched the Ministry of Tourism website on important Buddhist sites - indiathelandofbuddha.in and a new film showcasing the Buddhist sites in the country on the occasion. From 24th – 26th August, 2018, delegates would be taken for site visits to **Aurangabad, Rajgir, Nalanda, Bodhgaya and Sarnath**.

Flashback
1. The earlier International Buddhist Conclaves were organized in **New Delhi and Bodhgaya (February 2004)**, **Nalanda and Bodhgaya (February 2010)**, **Varanasi and Bodhgaya (September 2012)**, **Bodhgaya and Varanasi (September 2014)** and in **Sarnath/Varanasi and Bodhgaya (October 2016).**
2. The Indian Missions abroad have identified eminent Buddhist scholars / monks / opinion makers for International Buddhist Conclave 2018. The India Tourism Offices overseas have also identified tour operators/media etc. for the Conclave.
3. The Ministry of Tourism, Government of India has decided to organize **6th International Buddhist Conclave on the theme, "Buddha Path – The Living Heritage"**.

What

1. The Ministerial level delegation from **Bangladesh, Indonesia, Myanmar and Sri Lanka are participating in the conclave**.
2. The delegates from the following **29 countries** are participating in the International Buddhist Conclave: - Australia, Bangladesh, Bhutan, Brazil, Cambodia, Canada, China, France, Germany, Hong Kong, Indonesia, Japan, Lao PDR, Malaysia, Mangolia, Myanmar, Nepal, Norway, Russia, Singapore, South Korea, Slovak Republic, Spain, Sri Lanka, Taiwan, Thailand, UK, USA and Vietnam.
3. **India has a rich ancient Buddhist Heritage** with several important sites associated with the life of **Lord Buddha**. The Indian Buddhist Heritage is of great interest to the followers of Buddhism the world over.
4. **The aim of the Conclave is to showcase and project the Buddhist Heritage in India** and boost tourism to the Buddhist sites in the country and cultivate friendly ties with countries and communities interested in Buddhism.
5. The Conclave features presentations by the Ministry of Tourism and State Governments, Panel discussion between scholars and monks and **B2B meetings between the foreign and Indian tour operators**.
6. **The Ministry has also organized an 'Investors' Summit' during the Conclave** to attract investments in developing world class infrastructure at Buddhist sites.
7. **Ministry of Tourism has identified 17 sites in 12 clusters in the country for development under Iconic Tourist Sites Development Project**, pursuant to Budget Announcements of 2018-19.

8. Two prominent Buddhist sites namely Mahabodhi Temple (Bihar) & Ajanta (Maharashtra) feature among the Iconic Sites identified by the Ministry.

TEST OF ATGM 'HELINA'

Indigenously developed Helicopter launched **Anti-Tank Guided Missile 'HELINA'** has been successfully flight tested from **Army Helicopter at 1400hrs in the ranges of Pokhran**, on 19 August 2018. **The weapon system has been tested for its full range**.

What

1. **The 'HELINA'** weapon system released smoothly from the launch platform has tracked the target all through its course and hit the target with high precision.
2. All the parameters have been monitored by the telemetry stations, tracking systems and the Helicopters.
3. **The Missile is guided by an Infrared Imaging Seeker (IIR)** operating in the Lock on Before Launch mode.
4. It is one of the **most advanced Anti-Tank Weapons in the world**.

Flashback

1. The helicopter launched version known of NAG missile is known as **NAG (HELINA)** can be fired from Dhruv advanced light helicopter (ALH) and HAL Rudra attack helicopter.
2. The land-based version of missile is at present available for integration on the **Nag missile carrier (NAMICA)**.
3. **ATMG Nag is one of five missile systems** developed indigenously by DRDO under **integrated guided missile development programme (IGMDP)**.
4. The other four missiles are **Agni, Akash, Trishul and Prithvi**. It is manufactured by India's sole missile producer, state-owned Bharat Dynamics Limited.
5. **The Nag missile is third generation ATMG which works on "fire and forget" principle**. It has operational range of 500m to 4km (Land version) and 7-10km (when air-launched).
6. It is equipped with highly advanced Imaging Infrared Radar (IRR) seeker along with integrated avionics. This technology is possessed by very few nations.

INDIA'S FIRST ISTS CONNECTED WIND POWER PROJECT

Solar Energy Corporation of India Limited (SECI) conducted **India's first auction of wind power projects in February 2017** in which tariff of Rs. 3.46 was discovered, which was much lower than feed in tariffs in vogue those days. This was a 1000 MW bid for projects to be connected on **ISTS (Inter State Transmission System)** wherein power generated from one state (renewable resource rich state) could be transmitted to other renewable deficient states. Mytrah, Inox, Ostro, Green Infa and Adani were winners of the bid.

What

1. **As a part of this bid, M/s Ostro Kutch Wind Private Limited** was issued letter of award on 05.04.2017 for a capacity of 250 MW, with commissioning period of 18 months.
2. **A part capacity of 126 MW, located in Bhuj** (Gujarat) was commissioned by M/s Ostro on 24.08.2018, ahead of schedule.
3. The energy generated from this project is being purchased by Bihar, Odisha, Jharkhand and UP.
4. **The first auction also signified a major shift from the earlier regime of state-specific feed-in-Tariff (FiT) model to a Pan-India**, market-driven mechanism.
5. Beginning with this tender, SECI has brought out five tenders for wind power projects of cumulative capacity of 7250 MW, of which 6050 MW capacity has been awarded. **Besides SECI and NTPC being central agencies**, the State agencies of Tamil Nadu, Maharashtra and Gujarat have brought out bids and awarded projects based on tendering.

6.   This 126 MW ISTS project marks the beginning of capacity additions in wind power based on market discovered tariffs, in line with the Government's plan of 175 GW RE by the year 2022.

SAAW SUCCESSFUL TESTED

Indigenously designed and developed guided bombs **Smart Anti Airfield Weapon (SAAW) were successfully flight tested** from IAF aircraft at Chandan range. The weapon system was integrated with live warhead and has destroyed the targets with high precision. **The telemetry and tracking systems** captured all the mission events.

What

1.   This weapon is capable of destroying variety of ground targets **using precision navigation**.

2.   A total of three tests with different release conditions were conducted during 16 to 18 August 2018 and all the mission objectives have been achieved.

3.   **The weapon has undergone eight developmental trials till date** and performance of system for different ranges under multiple launch conditions has been demonstrated.

Flashback

1.   **The SAAW project is India's first fully** indigenous anti-airfield weapon project sanctioned by Government in September 2013.

2.   **SAAW is a long-range lightweight high precision-guided anti-airfield weapon**.

3.   It is 120 kg smart weapon capable of engaging ground targets with high precision **up to a range of 100 km**.

4.   It can be used to destroy bunkers, runways, aircraft hangers and other reinforced structures.

5.   SAAW's deep penetration capabilities and high explosive warhead carrying capacity will allow Indian Air Force (IAF) to easily hit targets across border without putting pilot and aircraft at risk.

6.   It can be integrated into the varied types of fighter jets with the IAF.

PULSES UNDER WELFARE SCHEMES

The Cabinet Committee on Economic Affairs has approved the release of **pulses to states/UTs** at discounted rate to be utilized for various Welfare Schemes from the stock of pulses procured under **Price Support Schemes (PSS)**. The decision will enable the states/UTs to use pulses in various Welfare Schemes like **PDS, Mid-Day Meal Scheme etc**. besides making available the warehouses, **which may be required in coming Kharif season for storage of commodities procured under Price Support Scheme**.

What

1.   Under this approved scheme, **the state/UT governments are offered to lift 34.88 lakh MT of Tur, Chana, Masoor, Moong and Urad at discount of Rs 15 per kg** over the prevailing wholesale market price of the sourcing state **on first come first serve basis**.

2.   The state/UT governments utilize these pulses in their various welfare schemes/programmes like **Mid-Day Meal, Public Distribution System, Integrated Child Development Programmes (ICDP) etc**.

3.   **This will be one-time dispensation for a period of 12 months or complete disposal of 34.88 lakh MT of pulses stock** whichever is earlier. Government will spend Rs 5,237 crore for implementation of this scheme.

4.   **The country has witnessed an all time high in the production of pulses** during the last 2 years. Government of India under Price Support Scheme has made record procurement of pulses during Kharif 2017 and Rabi 2018 marketing season.

UDAN PROGRAMME TO INTERNATIONAL ROUTES

The Centre unveiled a draft scheme for extending the affordable air travel programme UDAN to international circuits, with state governments identifying the routes for operation. **The draft International Air Connectivity (IAC) scheme** envisages increasing the international ticketing to 200 million by 2027. The scheme is to be made operational **only for states, which demonstrate their commitment to implement** and provide the requisite support for promoting operations under the scheme, the draft reads. Stakeholders' inputs and comment have been sought till September 4.

What

1. **UDAN was launched in 2016 to make air travel affordable for people through subsidised ticket rates** and to provide air connectivity to smaller towns.

2. Some states and aviation leaders had earlier suggested expanding the UDAN scheme overseas.

3. **The Assam government has, in fact, announced Rs 1 billion as viability gap funding** to promote international air connectivity from Guwahati.

4. SpiceJet had earlier this year pitched for an initiative on the lines of the regional connectivity scheme UDAN that can encourage Indian airlines to fly overseas.

5. According to the draft scheme, state governments will identify the routes to be connected, and airline operators will assess demand on the identified routes and submit proposals for providing connectivity.

6. Operations under the scheme will be permitted through **fixed-wing aircraft only with more than 70 seats**.

7. The scheme has proposed to set up an **International Air Connectivity Fund (IACF)** -- a dedicated fund for providing subsidy support under the scheme. It will be created through the contributions of state governments.

8. **The subsidy support shall be provided to selected airlines only for the passenger seats**, which remain unsold at the time of IAC flight operation, from the total number of passenger seats for which subsidy has been requested by the selected airline as part of its proposal. The subsidy support will be extended only up to three years.

9. **The Airport Authority of India** will be the implementing agency of the scheme.

5G PANEL REPORT

The steering committee set up to chart **India's 5G road map recommended additional spectrum for fuelling the next-generation of wireless services**, and suggested that the allocation of the **first tranche of such radiowaves** be announced this year. The panel, which submitted its report to the government on 23 August 2018, **gave wide-ranging recommendations to drive India's 5G aspirations** entailing areas such as **spectrum policy, regulatory policy, education and standards**. The economic impact of 5G is expected to be over $1 trillion, the report said.

What

1. **5G is a massive new opportunity...it can be leveraged for major societal transformation**, Professor AJ Paulraj, who chaired the committee, said.

2. The 5G roadmap pursued by India should not only move the country forward, but also result in progress of weaker sections of society.

3. Paulraj said he expected the **5G commercial rollout in India to happen around 2020**.

4. The steering committee also suggested **the constitution of a panel with a five-year term to advise on building spectrum technology infrastructure for India**.

5. The committee said that the DoT may provide financial support to telcos related to deployment - **backhauls, site acquisition, civil works and trials manpower and related operational costs**.

6. It added that additional financial support may be offered to internet service providers (ISPs), technology companies, local governments and economic verticals to participate in the trials.

7.   Further, **partial financial support for capital expenditure for equipment makers may also be considered based on equitable risk sharing**, the report said.

8.   The committee suggested a broad planning estimate of Rs 300 crore in Year 1, Rs 400 crore in Year 2, Rs 500 crore in Year 3 and Rs 400 crore in year 4.

9.   5G will enable rapid transformation in agriculture, manufacturing and social sectors and India can emerge as a technology innovator worldwide.

10.   The report suggested ways to accelerate 5G deployment in India, and said that **new bands below 4GHz should be opened up for the new technology to support mobile networks**.

11.   It recommended **allocation of 405 Mhz of sub 4GHz spectrum immediately while another 137 Mhz is under consideration requiring further studies**.

12.   It also suggested millimetre (MM) band for the 5G technology, and said that 140 Mhz spectrum for backhaul usage should be allowed in addition to opening up of new bands for indoor access in line with global practices.

13.   **The government has also created an 'Oversight Committee' under the Sundararajan**, Ministry of Electronics and IT secretary Ajay P Sawhney and Department of Science and Technology secretary Ashutosh Sharma.

14.   In order to facilitate application use cases, the forum also recommended creation of laboratories under different economical verticals and would allow application testing.

SIX STATES SIGN MOU FOR LAKHWAR DAM

The Centre and six states signed an agreement for the project on 28 August 2018. The MoU was signed by Nitin Gadkari, Water Resources Minister, with each of the six chief ministers – Arvind Kejriwal of Delhi, Yogi Adityanath of Uttar Pradesh, Vasundhara Raje Scindia of Rajasthan, Trivendra Singh Rawat of Uttarakhand, Manohar Lal of Haryana, Jai Ram Thakur of Himachal Pradesh. The project will be funded 90 per cent by the Centre, with the **remaining cost to be borne by the States**. **Upper Yamuna refers to the stretch of river** from its origin to the Okhla barrage in Delhi.

What

1.   **This project will raise storage levels and increase the water availability in the Yamuna by 65 per cent**.

2.   The States will get more water for drinking, irrigation and industrial use during December-June.

Flashback

1.   **Lakhwar-Vyasi Dam project on Yamuna River** includes under-construction **Lakhwar Dam and Power Station, Vyasi Dam**, Hathiari Power Station and Katapathar Barrage, near the Lakhwar town in Kalsi block of Dehradun district of Uttarakhand in India, for the purpose of irrigation of 40,000 hectare land and total 927 MW hydroelectric power generation.

2.   **Lakhwar Dam" is a gravity dam near the Lohari village** with 300MW power generation capacity.

3.   Ken-Betwa River linking project which required agreement between Uttar Pradesh and Madhya Pradesh, Gadkari said that Uttar Pradesh's Chief Minister Yogi Adityanath had given the green signal, while an approval from Madhya Pradesh's Shivraj Singh Chauhan was awaited. Gadkari indicated that work on Ken-Betwa river linking will also start soon.

EXERCISE KAKADU 2018

INS Sahyadri entered the Port of Darwin in Australia on 29 August 2018 to participate **Exercise KAKADU 2018**. **Exercise KAKADU, which started in 1993**, is the premier multilateral regional maritime engagement exercise **hosted by the Royal Australian Navy (RAN)** and **supported by the Royal Australian Air Force**

(RAAF).The exercise is held **biennially in Darwin and the Northern Australian Exercise Areas (NAXA)**.

What

1. **Exercise KAKADU derives its name from Kakadu National Park**, which is a protected area in the northern territory of Australia, 171 km south-east of Darwin.
2. **KAKADU 2018, the 14th edition of the exercise, is scheduled from 29 Aug – 15 Sep 18** and would see participation from 23 warships, one submarine, 45 aircraft, 250 marines and approx 52 foreign staff from over 25 different countries.
3. Indian Navy's participation in KAKADU 18 **provides an excellent opportunity to engage with regional partners** and undertake multinational maritime activities ranging from constabulary operations to high-end maritime warfare in a combined environment, aimed at enhancing interoperability and development of common understanding of procedures for maritime operations.
4. During the exercise, professional exchanges in harbour and diverse range of activities at sea, including complex surface, sub-surface and air operations would enable sharing of best practices and honing of operational skills.
5. At the helm of INS Sahyadri is Captain Shantanu Jha, who is assisted by a team of professional and highly motivated men of the Indian Navy.
6. **Participation in KAKADU 18 is a significant milestone in Indian Navy's efforts** towards strengthening mutual confidence among regional navies and is expected to further bolster India's contribution in **ensuring peace and stability in the Indo-Pacific region**.

INTERNATIONAL

EXERCISE SCO PEACE MISSION 2018

Exercise Shanghai Cooperation Organization (SCO) Peace Mission 2018, the latest in 'Peace Mission' series **formally started on 24 August 2018 at Chebarkul, Russia**. The opening ceremony was conducted in Chebarkul, Russia with military contingents of the **all eight SCO member nations participating in this exercise**. The contingents were addressed by Lieutenant General Alexander Pavlovich Lapin, Chief Commander Central Military District, Russia. The formal parade by military contingents was performed at the camp location of Combined Arms Range in Chebarkul, Russia.

What

1. **The exercise will provide an opportunity to the armed forces of SCO nations** to train in counter terrorism operations in urban scenario in a multinational and joint environment.
2. **The scope of the exercise includes professional interaction**, mutual understanding of drills & procedures, establishment of joint command and control structures and elimination of terrorist threat in urban counter terrorist scenario.
3. **The Russian Army has the major participation of 1700 personnel followed by China with 700 & India with 200 personnel**.
4. The SCO Peace Mission Exercise is one of the major defense cooperation initiatives amongst SCO nations and will be a landmark event in the history of SCO defence cooperation.

FOURTH BIMSTEC SUMMIT

Fourth BIMSTEC Summit was held in Kathmandu on 30-31 August 2018. The Prime Minister of the People's Republic of Bangladesh, the Chief Advisor of the Kingdom of Bhutan, **the Prime Minister of the Republic of India**, the President of the Republic of the Union of Myanmar, the Prime Minister of Nepal, the President of the Democratic Socialist Republic of Sri Lanka, and the Prime Minister of the Kingdom of Thailand were attended this summit. All Leaders were Reaffirmed the firm commitment to the principles and purposes of BIMSTEC as enshrined in the **1997 Bangkok Declaration** with Recalling the **Third BIMSTEC Summit Declaration**(Nay Pyi Taw, 4 March 2014) and the **BIMSTEC Leaders' Retreat Outcome Document** (Goa, 16 October 2016).

Summit Declaration

1. Affirming the **solemn commitment to making the Bay of Bengal Region peaceful, prosperous and sustainable** by building on our common strengths through our collective efforts
2. Being convinced that **geographical contiguity**, **abundant natural and human resources**, rich historical linkages and cultural heritage present great potentials for promoting deeper cooperation in identified core areas in the region
3. Recognizing that **eradication of poverty is the greatest regional challenge in realization of development objectives** and expressing firm commitment to working together for the implementation of the **Agenda 2030 for Sustainable Development**
4. Acknowledging that **enhanced inter-linkages and inter-dependence within the economies and societies in the BIMSTEC Member States** provide greater opportunity to advance regional cooperation
5. **Underlining the importance of multidimensional connectivity**, which promotes synergy among connectivity frameworks in our region, as a key enabler to economic integration for shared prosperity
6. Taking into consideration **the importance of trade and investment as one of the major contributing factors for fostering economic** and social development in the region.
7. **Recognizing the special needs and circumstances of the least developed and land-locked developing countries in the region** and underlining the necessity to provide meaningful support to their development process
8. Recognizing that **terrorism and transnational organized crimes continue to pose a great threat to international peace** and security including in the BIMSTEC countries and stressing that **combating terrorism and transnational organized crimes** require sustained efforts and cooperation and comprehensive approach involving active participation and collaboration of the Member States
9. **Reaffirming strong commitment to making BIMSTEC a dynamic, effective and result-oriented regional organization** for promoting a peaceful, prosperous and sustainable Bay of Bengal Region through meaningful cooperation and deeper integration
10. Stressing the need for a fair, just, rule-based, equitable and transparent international order and reaffirming faith in the multilateralism with the United Nations at the centre and the rule-based international trading system
11. Underscoring the importance of **robust institutional arrangements to effectively steering the process of regional cooperation under BIMSTEC**
12. Agree to intensify our efforts to realize the objectives and purposes of BIMSTEC as **embodied in the 1997 Bangkok Declaration**, and reiterate our pledge to work collectively towards making BIMSTEC a stronger, more effective and result-oriented organization for achieving a peaceful, prosperous and sustainable Bay of Bengal Region.
13. **Emphasize the importance of blue economy** and agree to cooperate in this sector for the sustainable development in the region and decide to establish an Inter-governmental Expert Group to develop an action plan on blue economy, keeping in mind the special needs and circumstances of the landlocked Member States.

KEY TAKEAWAYS OF US-MEXICO TRADE DEAL

The United States and Mexico agreed to a sweeping trade deal that **pressures Canada to accept new terms on autos trade, dispute settlement and agriculture** to keep the trilateral **North American Free Trade Agreement (NAFTA)**. US Trade Representative Robert Lighthizer said the White House was ready to notify the US Congress by President Donald Trump's intent to sign the bilateral document, but that it was open to Canada joining the pact. Donald Trump struggled to connect with Mexico's president, Enrique Pena Nieto, over the phone as **they were marking a new trade understanding**

between the countries. **The agreement could lead to an overhaul of the North American Free Trade Agreement**.

What

1. **The 24-year-old NAFTA is a trilateral deal between the United States, Canada and Mexico** that underpins $1.2 trillion in North American Trade.

2. **The new deal requires 75 per cent of the value of a vehicle to be produced in the United States or Mexico**, up from the NAFTA threshold of 62.5 per cent.

3. The higher threshold is aimed at keeping more parts from Asia out, boosting North American automotive manufacturing and jobs.

4. Even if more plants are built in Mexico, jobs will grow in the United States due to high levels of integration, with studies showing that US parts make up 40 per cent of the value of every Mexican-built car exported to the United States.

> **Dispute Settlement**
> 1. **Mexico agreed to eliminate a settlement system for anti-dumping disputes**, NAFTA's Chapter 19.
> 2. The move, sought by the United States, puts Canada in a difficult position because Prime Minister Justin Trudeau had insisted on maintaining Chapter 19 as a way to fight US duties on softwood lumber, paper and other products that it views as unfair. Ottawa now has less than a week to decide to accept a deal without that provision.
> 3. A settlement system for disputes between investors and states was scaled back, now only for expropriation, favouritism for local firms and state-dominated sectors such as oil, power and infrastructure.

5. The pact also requires greater use of US and Mexican steel, aluminum, glass and plastics.

6. **The provision started out as a US demand for 85 per cent regional content**, with **50 per cent coming from US factories**. That plan was vehemently opposed by Mexico, Canada and the auto industry.

7. **It later morphed into the US-Mexico deal's requirement of 40 to 45 per cent of a vehicle's value** to be made in high wage areas paying at least $16 an hour, requiring significant automotive production in the United States.

8. **Trump backed off from an initial US demand for a "sunset" clause** that would kill the pact unless it was renegotiated every five years and which businesses said would stymie long-term investment in the region.

9. **Canada and Mexico were strictly opposed to the clause**. Instead, the United States and Mexico agreed to a 16-year lifespan for NAFTA, with a review every six years that can extend the pact for 16 years more, providing more business certainty.

3RD LARGEST GROUP AFFECTED BY UK'S IMMIGRATION SCANDAL

Indians have emerged as the third-largest group affected by the **UK's 'Windrush' immigration scandal** involving Commonwealth nationals being **wrongly denied their citizenship rights in Britain**. The **'Windrush' scandal** is an immigration scandal concerning people **who were wrongly detained, denied legal rights, threatened with deportation** and in many cases wrongly deported from the UK by the authorities.

What

1. **The 'Windrush' generation refers to citizens of former British colonies who arrived before 1973**, when the rights of such Commonwealth citizens to live and work in Britain were substantially curtailed.

2. **From the Netherlands to France and on to Britain: travelers can taste Dutch cheese**, buy a freshly baked loaf of French bread and enjoy Yorkshire Pudding on tropical beaches on St. Martin and Anguilla.

3. While a large proportion of them were of Jamaican or **Caribbean descent, they also included Indians and other South Asians**.

4. As many as 102 Indians were provided documentation to formalise their rights to live and work in the UK by an emergency **'Taskforce' set up to deal with cases of Commonwealth nationals** who arrived in the UK before immigration rules became more stringent in 1973.

5. While the majority of the 2,272 migrants' cases dealt with by the 'Taskforce' came from Caribbean countries Jamaica (1,093) and Barbados (213), India at 102 came in third followed by Grenada (88) and Trinidad and Tobago (86), with 690 cases classed as "Others".

6. **Of the 102, a total of 69 Indians were granted their documentation under the 'Windrush Scheme'**, which ensures that members of this generation, their children born in the UK and those who arrived in the UK as minors are able to apply for citizenship free of charge.

7. The Home Office said that **its evidence suggests the 18 people came to the UK from the Caribbean before 1973** and stayed here permanently but were unable to demonstrate their continuous residence here and were either detained or removed.

8. The group referred to as the **'Windrush generation' relates to a ship named 'Windrush', which brought Jamaican workers to UK shores in 1948**.

9. The scandal emerged as many who arrived as children around that period were struggling to access state services or even threatened with deportation because they did not possess any documents to prove they arrived in Britain before 1973.

IRAN GOES TO UN'S HIGHEST COURT

Iran went to the United Nations' highest court 27 August 2018 in a bid to have US sanctions lifted following President Donald Trump's decision earlier this year to re-impose them, calling the move "**naked economic aggression**." **Iran filed the case with the International Court of Justice in July**, claiming that sanctions the Trump administration imposed on **May 8 breach a 1955 bilateral agreement known as the Treaty of Amity** that regulates economic and consular ties between the two countries.

What

1. At hearings that started 27 August 2018 at **the court's headquarters in The Hague**, Tehran is asking judges at the world court to urgently suspend sanctions to protect Iranian interests while the underlying case challenging their legality is being heard _ a process which can take years.

2. Trump said in May that **he would pull the United States out of a 2015 agreement over Iran's nuclear program** and would **re-impose sanctions on Tehran**.

3. Washington also threatened countries with sanctions if they don't cut off Iranian oil imports by early November.

4. **Iran's 2015 nuclear deal imposed restrictions on the Islamic Republic's nuclear program** in return for the lifting of most U.S. and international sanctions against Tehran.

5. **The deal came with time limits and did not address Iran's ballistic missile program** or its regional policies in Syria and elsewhere. Trump has repeatedly pointed to those omissions in referring to the accord as the "worst deal ever."

6. **The re-imposition of sanctions was unjustified as Iran was abiding by the terms of the 2015 deal**. Sanctions are already having damaging effects on Iran's economy and society and threaten to further destabilize the volatile Mideast region.

7. The United States, **which argues that the court does not have jurisdiction in the case**, is scheduled to present its legal arguments to judges on 28 August 2018.

8. The United States rejection of the nuclear deal is not backed by some key allies. Last week, the European Union announced its first financial support package to help bolster Iran's flagging economy, part of the bloc's commitment to keep the Iran nuclear deal alive.

9. **Iran and the United States have a history of litigation at the International Court of Justice**, in cases covering crises including the Tehran embassy hostage-taking and the shooting down of an Iranian passenger jet mistaken by a US warship for a fighter jet.

10. **The 1955 treaty was signed when the US and Iran were still allies following the 1953 revolution** — fomented by Britain and the US — that ultimately cemented the rule of Shah Mohammad Reza Pahlavi.

ECONOMY

RESTRICTIONS ON IMPORT OF BIO-FUELS

The government has imposed restriction on import of bio-fuels including **ethyl alcohol and other denatured spirits**, bio-diesel, petroleum oils and oils obtained from bituminous minerals other than crude, through an amendment in import policy.

What

1. The import of these items, which was free earlier, **will now only be allowed for non-fuel purpose on actual user basis**.

2. **Import policy of bio-fuels revised from 'free' to 'restricted'** and allowed for non-fuel purpose on actual user **basis as per the National Bio-Fuel Policy**.

3. In another notification, the government said export of beach sand minerals has been brought under state trading enterprise and **shall be canalised through Indian Rare Earths Limited**.

4. Export of rare earth compounds classified as beach sand minerals, permitted anywhere in the export policy, will now be regulated.

Flashback

1. **A biofuel is a fuel that is produced through contemporary biological processes**, such as **agriculture and anaerobic digestion**, rather than a fuel produced by geological processes such as those involved in the formation of fossil fuels, such as coal and petroleum, from prehistoric biological matter.

2. **Biofuels can be derived directly from plants** (i.e. energy crops), or **indirectly from agricultural, commercial, domestic**, and/or industrial wastes.

3. Renewable biofuels generally involve contemporary carbon fixation, such as those that occur in plants or microalgae through the process of photosynthesis.

UPI 2.0 LAUNCHED

An upgraded version of the **Unified Payments Interface (UPI), UPI 2.0**, was launched at a private event in Mumbai. Select members from the **National Payments Corp. of India (NPCI), banks** and the **Reserve Bank of India (RBI)** were present at the event.

What

1. **NPCI is the umbrella organization for all retail payments in the country**. It **also manages the UPI mobile platform**, which facilitates instant fund transfers between two bank accounts, without revealing the details of the accounts.

2. **Several features were added to UPI 2.0, including an overdraft facility**, which enables customers to link their overdraft account to UPI and carry out transactions instantly.

3. **The one-time mandate feature allows customers to pre-authorize a transaction** and pay at a later date, while the invoice in the box feature allows customers to check the invoice sent by merchants prior to making a payment.

4. The signed intent and QR feature enables customers to check the authenticity of merchants while scanning QR codes.

5. **Large number of banks, merchants, third-party players and consumers trusted this (UPI) platform**, which resulted in substantial growth in terms of volume and value of transactions since its inception.

6. **As of now, 11 banks, including SBI, HDFC Bank, Axis Bank, ICICI Bank and IDBI Bank, have integrated with UPI 2.0**, said NPCI.

7. **UPI is a path breaking innovation that is unprecedented globally**. Its high-volume, low-cost and highly scalable architecture built on an open source platform, and is key to India's transformation to a digital payment economy.

8. **The new version of UPI allows higher transaction limits** and has more secure QR-based payments. These added features go on to make UPI a more attractive option.

Flashback

1. **Unified Payments Interface (UPI) is a system** that powers multiple bank accounts into a **single mobile application (of any participating bank)**, merging several banking features, seamless fund routing & merchant payments into one hood.

2. **It also caters to the "Peer to Peer" collect request** which can be scheduled and paid as per requirement and convenience.

3. NPCI conducted a pilot launch with 21 member banks. **The pilot launch was on 11th April 2016 by Dr. Raghuram G Rajan, Governor, RBI at Mumbai**.

4. Banks have started to upload their UPI enabled Apps on Google Play store from 25th August, 2016 onwards.

9. Currently, **UPI drives about 8-9% of our transaction volumes** and with the merchant friendly features of UPI 2.0, we are looking forward to achieving promising growth.

BRAP 2017

Maharashtra, the most industrialised state in the country, has been ranked 13th — below **Gujarat, Andhra Pradesh, Madhya Pradesh, Haryana and Telangana**, among others — in the '**ease of doing business**' rankings. **The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce**, brought out the Assessment of States for the **Business Reform Action Plan 2017 (BRAP)**, which gives the ease of doing business

Flashback

1. **The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry**, in partnership with the World Bank Group, released the **Business Reform Action Plan (BRAP) 2017** for implementation by States/UTs on 13.04.2017.

2. **The BRAP includes 405 recommendations for reforms** on regulatory processes, policies, practices and procedures spread across 12 reform areas, that is, labour regulation enablers; contract enforcement; registering property; inspection reform enablers; single window system; land availability and allotment; construction permit enablers; environmental registration enablers; obtaining utility permits; paying taxes; access to information and transparency enablers and sector specific reforms spanning the lifecycle of a typical business.

3. **This year there are 103 new set of reforms (out of 405) focusing on central inspection system**, online land allotment system, online single window system for granting construction permits, registration under Inter State Migrant Workmen (RE&CS) Act, 1979, approval for boiler manufacturer and boiler erector etc.

4. BRAP 2017 also includes two new sectors i.e. Healthcare and Hospitality.

5. **DIPP will carry out a comprehensive business-to-government (B2G) feedback exercise**.

rankings for all states and Union territories, last month. **The assessment was made by the World Bank in collaboration with the DIPP**.

What

1. **Andhra Pradesh got the top ranking**. It was followed by Telangana, Haryana and Jharkhand. Andhra Pradesh, however, was ranked third in evidence score, a list topped by Jharkhand and Telangana with a 100 per cent score.

2. **Again, Andhra Pradesh scored the best on feedback with 86.5 per cent**. Unlike in the overall and reform category, no state scored above 90 per cent in the feedback category.

3. **The importance of implementation of reforms on the ground is effectively captured**, as the states' scores on feedback reflect the discrepancy between reforms claimed as enacted and those actually made accessible to the users. The state with the highest GDP, Maharashtra, was ranked 13th in the overall score.

4. **While Maharashtra has interest payments as a slight concern, it retains its position as the state that attracts the highest FDI and private investment**.

5. The state has to work on the aspect of reform access, as it scores far too low compared with others on the feedback front. Given persistent revenue deficits there would always be pressure to compensate for this imbalance, which can affect **capital expenditure (capex)**.

6. Maharashtra had a revenue deficit of Rs 14,843 crore for 2017-18 — third highest revenue deficit after UP (Rs 18.515 crore) and Tamil Nadu (Rs 18,370 crore).

7. Andhra Pradesh, which ranks first, shows a high Debt to GSDP ratio of around 28 per cent and a revenue deficit of Rs 4,000 crore.

8. The same goes with Haryana ranked third, which has a revenue deficit twice as much as Andhra. Thus a fiscal push is likely to be more challenging as both have interest to revenue ratios above the **FRBM (Fiscal Responsibility and Budget Management) mandate of 10 per cent**.

9. They would have to persevere with reforms to get in more private investment.

SINGLE FORM FOR FOREIGN INVESTORS

The government has introduced a **single application form for foreign investors** to enter into the domestic capital market as **part of the exercise to improve ease of doing business**. **Earlier, foreign portfolio investors (FPIs)** had to file a separate form to register them with the market regulator Sebi. Besides, they had to approach bank for opening bank account, **income tax department for PAN (Permanent Account Number)** and **market intermediaries for DEMAT account**.

What

1. Finance Minister Arun Jaitley in his 2017-18 Budget Speech had said a **common application form for FPIs would be devised** with a view to enhance operational flexibility and ease of access to Indian capital markets.

2. The central government has now notified "the Common Application Form...for the purpose of registration, opening of bank and demat accounts, and application for permanent account number by FPIs in India".

3. **The long-pending single combined application form for registration of FPIs with the Securities and Exchange Board of India**, allotment of PAN and know your customer (KYC) for opening bank and demat account is expected to reduce time and cost for the foreign investors.

4. The common application form was prepared jointly by Sebi, **Reserve Bank of India and Central Board of Direct Taxes (CBDT)**.

5. As per the notification of the Department of Economic Affairs in regards to the common application form, FPIs will have to provide information regarding 'Ultimate Beneficial Owner' of investments.

6. Last week, Sebi had extended the deadline for FPIs by two months till December for providing a list of beneficial owners and assured them that issues raised will be looked into by an expert panel.

7. **This is similar to the new company incorporation form introduced last year** which enables the applicant to apply for PAN/TAN at the time of incorporation of company itself.

8. Making the compliances easy for the foreign investors would not only bring up their confidence on Indian market but it will also help to push India ranking in global index of ease of doing business, he added.

9. **According to the latest depository data, foreign portfolio investors (FPIs) pumped in a net sum of Rs 20. 48 billion into equities** during August 1-24 and a net amount of Rs 46.62 billion into the debt market, taking the total to Rs 67. 10 billion.

What is FPI

1. **Foreign portfolio investment (FPI)** consists of **securities and other financial** assets passively held by foreign investors.

2. **It does not provide the investor with direct ownership of financial assets** and is relatively liquid depending on the volatility of the market.

3. **Foreign portfolio investment differs from foreign direct investment (FDI)**, in which a domestic company runs a foreign firm, because although FDI allows a company to maintain better control over the firm held abroad, it may face more difficulty selling the firm at a premium price in the future.

10. Overall, so far this year, FPIs have pulled out more than Rs 21 billion from equities, while they withdrew nearly Rs 370 billion from the debt markets.

SCIENCE AND TECHNOLOGY

NEW PANEL FOR INNOVATIONS

The government constituted a 21-member panel to advise PM Narendra Modi on science, technology and innovations. Headed by principal scientific adviser to the government **K Vijay Raghavan**, the panel — called **Prime Minister's Science, Technology & Innovation Advisory Council (PMSTIAC)** — will also assist the government in using science, technology and innovation for "**solving socio-economic problems**" in the country.

What

1. Advising the government on developing '**Clusters of Excellence' in science including city-based R&D clusters** will also be one of the 17 tasks of the panel.

2. It will work to bring together all science & technology partners from academia\ institutes to industries near such centres or cities.

3. Besides the chairperson, **the panel has eight members and 12 special invitees**.

4. The members include noted mathematician and Princeton University professor Manjul Bharghava; former Isro chairman A S Kiran Kumar and industrialist and MD of Bharat Forge Baba Kalyani.

POLICY FOR THALASSEMIA PATIENTS

The health ministry has proposed a **draft policy suggesting compulsory genetic screening of all pregnant women** to prevent inherited disorders such as **thalassemia and sickle cell anaemia** along with putting in place advanced facilities for comprehensive care of such patients. The draft policy includes **provision of medicines**, **including iron chelating agents, leukocyte filters** and **infusion pumps free of cost** to the poor patients. It also envisages provision of services for patients with **hemoglobinopathies** by strengthening existing public health facilities.

What

1. **The policy envisages creation of centres of excellence in states** that will have advanced facilities required for comprehensive care of patients with

thalassemia/sickle cell disease, **including a bone marrow transplant unit and a prenatal diagnostic center**," the draft policy, titled "**Policy For Prevention and Control of Hemoglobinopathies – Thalassemia, Sickle Cell Disease and variant Hemoglobins In India**", says.

2.   The draft policy also proposes **creation of hemoglobinopathy unit in government medical colleges**, **tertiary care facilities as well as in district-level hospitals** to carry out therapy as well as preventive activities.

3.   It also suggests **setting up of a patient registry for thalassemia and sickle cell disease** to obtain information on the number of persons affected and the number of carriers to estimate patients who require various services. The health ministry has sought stakeholder comments on the draft policy by August 30.

4.   The policy recognises that for prevention, **the focus should be on creating awareness of these disorders in the community** for better acceptance of carrier screening.

5.   This is recommended for all pregnant mothers, based on automated red cell counts with **confirmation by HPLC analysis for Hb A2 and other hemoglobin variants**.

6.   For women identified to be carriers, their husbands will be screened and in couples where both the partners are carriers, prenatal diagnosis will be offered to ensure that they have a baby unaffected with a clinically significant hemoglobinopathy," the draft said.

7.   As per the draft policy, **all subjects screened would be given a card indicating their status**, whether normal, carrier or **diseased through systems of colour-coding**. For sickle cell disease, policy recommended newborn screening will be initiated in areas of high prevalence.

8.   **Thalassemia and sickle cell diseases are two common genetic disorders** that are chronic, life-restricting and require long and specialized treatment. They cause severe distress and financial loss to the family and are a great drain on the health resources of the country.

9.   According to the draft note, **it is estimated that there are almost 3.6 to 3.9 crore carriers of ß-thalassemia in India**, and about 10,000 to 15,000 babies with ß-thalassemia major are born each year.

10.   For sickle cell disease there are about 25,00,000 carriers of the gene (Hemoglobin AS), and about 1,25,000 patients of sickle cell disease.

INDIA'S FUTURE ASTRONAUTS' TRAINING CENTRE

India's future astronauts training facility, plans for which have been on the drawing board since 2008-09 awaiting official clearance of the **Human Spaceflight Programme (HSP)**, will finally be realised on a land located about eight to ten kilometres from the **Kempegowda International Airport (KIA)** on the outskirts of Bengaluru city, as per current plans. The facility, likely to be named **Astronaut Training and Biomedical Engineering Centre**, will be developed on the land owned by the **Indian Space Research Organisation (Isro)** around its guest house in Devanahalli (Bengaluru Rural) and is expected to **resemble the one in Russia where cosmonauts or astronauts from around the world undergo training**. The centre is likely to be spread across 40-50 acres.

INSIGHT SPACECRAFT CROSSES HALFWAY MARK TO MARS

NASA's InSight spacecraft that is en route to Mars has passed the **halfway mark to its destination** and all its instruments are working well, the US space agency said. **InSight stands for Interior Exploration using Seismic Investigations, Geodesy and Heat Transport**. The spacecraft, which crossed the halfway mark on August 6 is expected to **land on Mars on November 26** to study the Red Planet's deep interior, NASA said.

What

1.   **The spacecraft has now covered 277 million km since its launch 107 days ago** and in another 98 days, it will travel another 208 million km and touchdown in **Mars' Elysium Planitia region**.

2. Earlier the lander's launch and landing were scheduled around Mars' closest approach to Earth that occurred on July 31. However, it was delayed by the Martian storm that has engulfed the Planet and has cut off communication with another NASA robot, the Mars rover Opportunity.

3. **NASA engineers used this long travel time to plan**, activate and check spacecraft subsystems vital to cruise, landing and surface operations, including the highly sensitive science instruments.

4. The instruments aboard the spacecraft include a **seismometer**, which will be used to detect quakes on Mars, and a self-hammering probe that will measure the amount of heat escaping from the planet's interior. It also has cameras to take"selfie" of the mission's equipment.

What is the spacecraft?
1. **The spacecraft is the protective "spaceship"** that protects the lander during its travel **between Earth and Mars**.
2. The spacecraft is separate from the launch vehicle that carries the spacecraft and the lander **outside of Earth's atmosphere and gravitational pull**.
3. The spacecraft includes the mechanical units that safely maneuver the lander through the Martian atmosphere to a landing on Mars.

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5. The camera will take the **first image of Elysium Planitia minutes after InSight touches down on Mars in November**.

PRESENCE OF ICE ON MOON

Scientists have confirmed the presence of **frozen water deposits** in the darkest and coldest parts of the **Moon's Polar Regions using data from the Chandrayaan-I spacecraft** that was launched by India 10 years ago NASA said on 21 August 2018. With enough ice sitting at the surface — within the top few millimetres — **water would possibly be accessible as a resource for future expeditions to explore** and even stay on the Moon, and potentially easier to access than the water detected beneath the Moon's surface. **The ice deposits are patchily distributed** and could possibly be ancient.

What

1. **At the southern pole, most of the ice is concentrated at lunar craters**, while the northern pole's ice is more widely, but sparsely spread.

2. Scientists used data from NASA's **Moon Mineralogy Mapper (M3) instrument** to identify three specific signatures that definitively prove there is water ice at the surface of the Moon.

3. **M3, aboard the Chandrayaan-1 spacecraft, launched in 2008 by the Indian Space Research Organisation (ISRO)**, was uniquely equipped to confirm the presence of solid ice on the Moon.

4. It collected data that not only picked up the reflective properties we would expect from ice, but was able to directly measure the distinctive way its molecules absorb infrared light, so it can differentiate between liquid water or vapour and solid ice.

5. **Most of the newfound water ice lies in the shadows of craters near the poles**, where the warmest temperatures never reach above minus 156 degrees Celsius. Due to the very small tilt of the Moon's rotation axis, sunlight never reaches these regions.

6. **Previous observations indirectly found possible signs of surface ice at the lunar south pole**, but these could have been explained by other phenomena, such as unusually reflective lunar soil.

7. In 2016, NASA used ground-based radar systems **to relocate Chandrayaan-1 in its lunar orbit**. Repeated observations over the next three months allowed a precise determination of its current orbit.

KERALA TO GET CYCLONE WARNING CENTRE

A Cyclone Warning Centre (CWC) will be set up in Thiruvananthapuram in a month, the Ministry of Earth Sciences said. The proposal to set up the centre follows **several incidents of tropical cyclones and severe weather events** that have affected Kerala and Karnataka coasts in recent times, ministry officials said.

What

1. The India Met Department currently has cyclone warning centres in **Chennai, Vishakapatnam, Bhubaneswar, Kolkata, Ahmedabad and Mumbai**.
2. This centre will cater to the needs of **Kerala and Karnataka and be equipped with state-of-the-art infrastructure** including forecasting tools to issue weather warnings and coastal bulletins and it will better inform the fishermen community. This centre was being considered since **Cyclone Ockhi**.
3. The MoES also said **it would set up another C-Band Doppler Weather Radar at Mangalore by end-2019**, which will cover the northern parts of Kerala.
4. At present, there are two Doppler Weather Radars in the state, at Kochi and Thiruvananthapuram. With these 3 radars, the entire state will be covered for monitoring of rainfall and severe weather events, and adequately warn people well in advance.

REASONS BEHIND KERALA FLOODS

NASA used satellite data and **provides an estimate of rainfall and shows the spread of the resulting severe flooding in Kerala**, and parts of Karnataka. **The summer monsoon is a regular feature this time of year in India** and it can bring heavy rains to the region. However, **periodically areas of low pressure can form within the general monsoon trough and bring even more rain**.
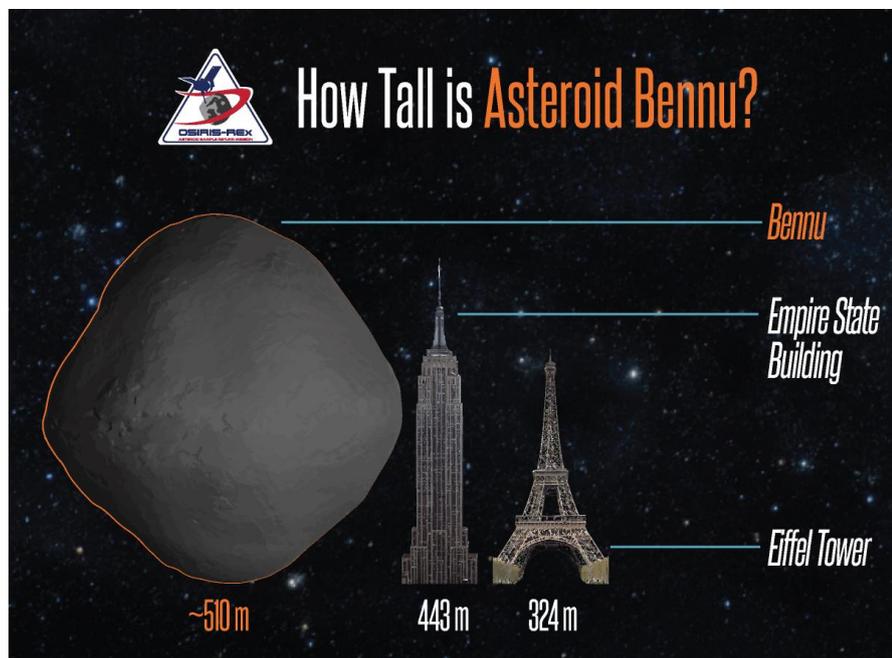
What

1. Kerala is facing its worst floods in nearly a century that has **left at least 231 people dead**, and forced over thousands of people out of their homes.
2. **The Centre has declared this calamity of 'severe nature'**. Although the extreme Himalayan topography is much more well-known, another contributing factor to the heavy rains along the southwest coast of India is the Western Ghats, NASA said in a statement.
3. Though much smaller than the Himalayas, this mountain range runs parallel to the West Coast of India with many peaks over 2,000 metres.
4. As a result, **the Western Ghats are well positioned to enhance rainfall along the West Coast of India** as they intercept the moisture laden air being drawn in off the warm waters of the northern Indian Ocean and Arabian Sea as part of the southwest monsoon circulation.
5. The **Integrated Multi-satellitE Retrievals for GPM (IMERG)** is used to estimate precipitation from a combination of **passive microwave sensors**, including microwave sensor and infrared data.
6. **GPM is the Global Precipitation Measurement mission core satellite**. GPM is a **joint mission between NASA and the Japan Aerospace Agency, JAXA**.
7. Rainfall accumulations from August 13 to 20, 2018 showed two bands of heavy rain across India. **The first band appeared much broader and extends across the northern part of the peninsula** with weekly rainfall totals ranging from over 5 inches towards the western half of the peninsula to as much as 14 inches over parts of the eastern half towards the Bay of Bengal. **The first band is associated with the general monsoon circulation**.
8. **The second band appeared more concentrated** and intense and is closely aligned with the southwest coast of India and the Western Ghats where onshore flow was enhanced by an area of low pressure embedded within the general monsoon.
9. **Weekly rainfall totals in this band are generally over 10 inches with embedded areas exceeding 16 inches**. The maximum estimated value from IMERG in this band was 18.5 inches.

FIRST IMAGES CAPTURED OF ASTEROID BENNU

NASA's Origins, Spectral Interpretation, Resource Identification, Security-Regolith Explorer (OSIRIS-REx) spacecraft has captured the **first glimpse of its distant target — asteroid Bennu** — after almost two years of journey. **Launched on September 8, 2016**, the OSIRIS-REx, which is **NASA's first mission to visit a near-Earth asteroid**, is scheduled to arrive at Bennu on December 3.

What

1. **It will help unveil the mysteries of our solar system's formation**, the US space agency said in a statement.

2. The spacecraft's PolyCam camera obtained the image from a **distance of 1.4 million miles** (2.2 million km) or almost six times the distance between the Earth and the Moon, on August 17.

3. The cropped sets of five images were obtained over the course of an hour. **Bennu** is visible as a moving object against the stars in the **constellation Serpens**.

4. As **OSIRIS-REx approaches the asteroid**, the spacecraft will use its science instruments to gather information about Bennu and prepare for arrival. It will regularly observe the area around Bennu to search for dust plumes and natural satellites and also study its light and spectral properties.

5. Now that **OSIRIS-REx is close enough to observe Bennu**, the mission team will spend the next few months learning as much as possible about Bennu's size, shape, surface features, and surroundings before the spacecraft arrives at the asteroid.

6. After arrival at Bennu, **the spacecraft will spend the first month performing flybys of Bennu's north pole**, equator and south pole, at distances ranging between 11.8 and 4.4 miles (19 and 7 km) from the asteroid.

7. **The spacecraft will extensively survey the asteroid before the mission team** identifies two possible sample sites, which will allow the team to pick one for sample collection, scheduled for July 2020.

8. After the sample collection, the spacecraft will head back towards Earth before ejecting the "**Sample Return Capsule**" for landing in the Utah desert in September 2023.

SPITZER TELESCOPE COMPLETES 15 YEARS IN SPACE

NASA's Spitzer Space Telescope – which was initially scheduled **for 2.5-year primary mission – has completed 15 years of space exploration**. Launched into a solar orbit **in 2003**, Spitzer has illuminated some of the oldest galaxies in the universe, **revealed a new ring around Saturn**, and peered through shrouds of dust to study newborn stars and black holes. **It assisted in the discovery of planets beyond our solar system**,

including the **detection of seven Earth-size planets orbiting the star TRAPPIST-1**, among other accomplishments.

What

1.	**In its 15 years of operations, Spitzer has opened our eyes to new ways of viewing the universe**.

2.	**Spitzer's discoveries extend from our own planetary backyard**, to planets around other stars, to the far reaches of the universe. And by working in collaboration with NASA's other Great Observatories, **Spitzer has helped scientists gain a more complete picture of many cosmic phenomena**.

3.	With its infrared vision and high sensitivity, Spitzer has contributed to the study of some of the most distant galaxies in the known universe.

4.	**The light from some of those galaxies travelled for 13.4 billion years to reach Earth**. As a result, scientists see these galaxies as they were less than 400 million years after the birth of the universe.

5.	In recent years, scientists have utilised Spitzer to study exoplanets, or planets orbiting stars other than our Sun, although this was not something the telescope's designers anticipated.

6.	**Spitzer also played a key role in one of the most significant exoplanet discoveries in history**: the detection of seven, roughly Earth-size planets orbiting a single star.

7.	**The TRAPPIST-1 planetary system was unlike any alien solar system ever discovered**, with three of its seven planets located in the "habitable zone, where the temperature might be right for liquid water to exist on the planets' surfaces. Their discovery was an enticing step in the search for life elsewhere in the universe.

8.	**The study of extrasolar planets was still in its infancy when Spitzer launched**, but in recent years, often more than half of Spitzer's observation time is used for studies of exoplanets or searches for exoplanets.

9.	**Spitzer is very good at characterising exoplanets**, even though it wasn't designed to do that. **Spitzer has logged over 106,000 hours of observation time**.

WATER SPOTTED AT JUPITER'S GREAT RED SPOT

Looking at the depths of the Jupiter's Great Red Spot, a storm that has been raging on the planet for over 350 years, **NASA scientists has found water above the planet's deepest clouds**. The team led by Gordon l. Bjoraker, Astrophysicist at NASA's Goddard Space flight center in Maryland, US, was looking from **ground-based telescopes at wavelengths** sensitive to thermal radiation **leaking from the depths of Jupiter's persistent storm**, when they detected the chemical signatures of water above the planet's deepest clouds.

What

1.	**The pressure of the water, combined with the measurements of another oxygen-bearing gas, carbon monoxide**, imply that Jupiter has two to nine times more oxygen than the sun.

2.	This finding **supports theoretical and computer-simulation models that have predicted abundant water (H_2O) on Jupiter**, the scientists said.

3.	**The moons that orbit Jupiter are mostly water ice**, so the whole neighborhood has plenty of water. Why wouldn't the planet — which is this huge gravity well, where everything falls into it — be water rich, too?" Bjoraker said in a statement.

4.	**The location of the water cloud, plus the amount of carbon monoxide** that the researchers identified on Jupiter, confirms that Jupiter is rich in oxygen.

5.	Jupiter's water abundance will tell us a lot about **how the giant planet formed**, but only if we can figure out how much water there is in the entire planet.

6.	The revelation was stirring given that the team's experiment could have easily failed. **The Great Red Spot is full of dense clouds**, which makes it hard for

electromagnetic energy to escape and teach astronomers anything about the chemistry within.

7.   **The data collected will supplement the information NASA's Juno spacecraft** is gathering as it circles the planet from north to south once every 53 days.

8.   If Juno returns similar water findings, thereby backing Bjoraker's ground-based technique, it could open a new window into solving the water problem.

MISCELLANEOUS

CONSULTATION PAPER ON COMMON CODE

On the day its term comes to an end, **the Law Commission issued a consultation paper** on 31 August 2018 **on personal laws**, which discusses **introduction of new grounds for 'no fault' divorce**, **changes to provisions on alimony and maintenance** and uncertainty and inequality in age of consent for marriage. Instead of a full-fledged report on a **uniform civil code**, the law panel preferred a consultation paper as it had little time at hand to bring out a comprehensive report.

What

1.   **Panel Chairman Justice B S Chauhan** (retd) had earlier said **instead of recommending a uniform code**, the commission might suggest "**piecemeal" changes in personal laws**.

2.   **Now, it will be up to the 22nd Law Commission** to bring out a final report on the controversial issue which has generated a heated debate in the recent past. The Law Ministry had on June 17, 2016 asked the panel to "**examine matters in relation to uniform civil code**".

3.   **The issue of a uniform civil code is vast**, and its potential repercussions, untested in India. Therefore, after detailed research and a number of consultations held over the course of two years, the Commission is presenting its consultation paper on reform of family laws in India," the consultation paper said.

Various suggestions

1.   **Under the Hindu law**, the paper discusses problems with provisions such as **restitution of conjugal rights** and suggests the inclusion of concepts such as '**community of property**' of a married couple, abolition of coparcenary and rights of illegitimate children.

2.   **Under the Muslim law, it discusses the reform in inheritance law through codification of Muslim law** on inheritance and that it gender just.

3.   The paper also discusses the rights of a widow, and the changes to general laws such as introduction of community of (self acquired) property after marriage, inclusion of irretrievable breakdown of marriage as a ground for divorce.

4.   **For Parsi law, there are suggestions relating to protecting married women's right to inherit property** even if they marry outside their community.

5.   The paper also suggests the **expansion of the Juvenile Justice (Care and Protection) Act, 2015**, to make it into a robust secular law that can be accessed by individuals of all communities for adoption.

6.   There are suggestions for amending the guidelines for adoption and also a suggestion to alter the language of the act to accommodate all gender identities.

7.   **The paper discusses lacunae within custody and guardianship laws**, statutory or customary, and suggests that the 'best interest of the child' has to remain the paramount consideration in deciding matters of custody regardless of any prevailing personal law in place.

8.   Although the **sixth schedule provides for exemptions to states in the North East and tribal areas**, the panel suggests that efforts of women's organisations in these areas be acknowledged and relied upon in this regard to suggest ways in which family law reform could be aided by the State even when direct intervention may not be possible.

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9. Since a number of these issues such as polygamy, nikah halala, settlement of a Parsi wife's property for benefit of children, as well as the law on adultery among others are **under the consideration of the Supreme Court**, they have been discussed in the paper but comprehensive changes on some of these issues have not been suggested at this stage.

SIMULTANEOUS POLLS WITH SOME RIDER

The Law Commission on 30 August 2018 ruled out the possibility of immediate **simultaneous elections** in a draft report, but supported the idea on **grounds of savings**, **administrative ease** and **smooth policy implementation**. It, however, added that **holding simultaneous elections to the Lok Sabha and assemblies was "not possible within the existing framework of the Constitution"** and suggested amendments, listing three options that it said **could be rolled out in the future**.

What

1. **In order to achieve holding simultaneous elections**, terms of certain state legislative assemblies will require curtailment or extension, **necessitating amendment to the Article 172 of the Constitution**.

2. **The amendments to the Constitution** and other statutes are kept to the barest minimum," said the draft report on the proposal that is backed by the ruling Bharatiya Janata Party (BJP) but opposed by the Congress.

3. **Its first suggestion was to hold elections to 12 assemblies and Delhi along with the Lok Sabha polls in 2019**, leaving until 2021 the polls to the remaining 16 assemblies and Puducherry.

4. The term of the state legislative assemblies so constituted as a result of the elections in 2021 shall be only for thirty months or till June 2024, whichever is earlier.

5. **In case of a hung assembly or Parliament**, it recommended that all efforts should be made by the President or governor to install a government that would enjoy the support of the House or assembly, giving an opportunity to the largest party along with their pre-poll or post-poll alliances.

6. **The second option is to synchronize elections in such a manner that they are held only twice in five years**. This would mean holding simultaneous elections to the Lok Sabha and assemblies of 12 states and Delhi in mid-2024, followed by elections to the remaining states by the end of 2026.

7. **The third option would be that "all elections falling due in one calendar year be conducted together** during such part of the year, which is conducive to all the state legislatures."

8. The commission also suggested that in order to ensure stability of governments, the concept of constructive **vote of no-confidence** may be adopted and there should be the option of limiting the number of no-confidence motions during the term of a House or assembly.

9. Third, the Law Commission report itself, while **vaguely supporting the concept**, has actually written more against it than for it and has indirectly validated our views.

ATAL BIHARI VAJPAYEE DIED

Former prime minister and BJP stalwart **Atal Bihari Vajpayee has died** at the **All India Institute of Medical Sciences (AIIMS) in Delhi**, the hospital on 16 August 2018. He was 93. **The three-time prime minister** was admitted to the hospital on 11 June this year in a critical condition and had been at the facility since then.

What

1. The 93-year-old BJP leader was the **oldest living former Indian prime minister**.

2. Vajpayee had undergone knee replacement surgery at Breach Candy Hospital in Mumbai in 2001 and **suffered a stroke in 2009 that impaired his speech**.

3. **A founding member of the Bharatiya Jana Sangh,** a precursor of the Bharatiya Janata Party (BJP), and a parliamentarian for four decades, **Vajpayee is the first**

non-Congress leader to have completed a five-year term (1999-2004) as India's prime minister.

4. During his second term, from 1998 to 1999, India conducted the **second Pokhran nuclear tests (May 1998)** and Vajpayee attended the **Lahore summit (February 1999)** where he travelled to Pakistan in a bus for establishing full-fledged diplomatic relations with the country. That, however, wasn't to be as India and Pakistan soon fought the Kargil War (1999).

5. Vajpayee never married and has an adopted daughter, Namita.

PAKISTAN'S 22ND PM

Pakistan Tehreek-e-Insaf (PTI) chairman **Imran Khan has been sworn-in as the 22nd Prime Minister of the country at Aiwan-e-Sadr** (the President House) in Islamabad on 18 August 2018. Pakistan President **Mamnoon Hussain** administered the oath to Khan.

What

1. Khan, who led the Pakistan cricket team to their **only World Cup victory in 1992**, assumed the prime ministerial post after more than two decades, since joining politics in 1996.

2. On 17 August 2018, Khan was elected as the **new Prime Minister of Pakistan**, defeating his rival **Pakistan Muslim League-Nawaz (PML-N) candidate Shehbaz Sharif**.

3. **In the July 25 general elections, the PTI had emerged as the single largest party with 116 seats**.

4. The number increased to 158 in the NA after the Election Commission of Pakistan (ECP) issued notifications of the successful candidates on the reserved seats for women and the minority community on August 11.

Flashback

1. **Pakistan is a country in South Asia**. It is the **fifth-most populous country,** In area, it is the **33rd-largest country.**

2. The **name of the country was coined in 1933 as Pakstan by Choudhry Rahmat Ali**, a Pakistan Movement activist, who published it in **his pamphlet now or never.**

3. He used it as an acronym referring to the names of the **five northern regions of the British Raj**: **Punjab, Afghania, Kashmir, Sindh, and Baluchistan**. The **letter i was incorporated to ease pronunciation**.

4. **Pakistan is the only country to have been created in the name of Islam**. As a result of the Pakistan Movement led by Muhammad Ali Jinnah and the Indian subcontinent's struggle for independence, **Pakistan was created in 1947 as an independent homeland for Indian Muslims**.

5. Initially a dominion, **Pakistan adopted a constitution in 1956**, becoming an Islamic republic.

6. An ethnic civil war in 1971 resulted in the secession of **East Pakistan as the new country of Bangladesh**.

KOFI ANNAN DIES

Patrician diplomat from Ghana **Kofi Annan,** who became the **seventh secretary general of the United Nations**, projecting himself and his organization as the **world's conscience and moral arbiter despite bloody debacles** that left indelible stains on his record as a peacekeeper, died on 18 August 2018. He was 80. His death, after a short illness, was confirmed by his family in a statement from the **Kofi Annan Foundation, which is based in Switzerland**.

What

1. **Awarded the Nobel Peace Prize in 2001**, he was the **first black African to head the United Nations**, and led the organization for **two successive five-year terms** beginning in 1997 — a decade of turmoil that challenged the sprawling body and redefined its place in a changing world.

2. His tenure was rarely free of debate, and **he was likened in stature to Dag Hammarskjold, the second secretary general**, who died in a mysterious plane crash in Africa in 1961.

3. **In 1998, Mr. Annan traveled to Baghdad to negotiate directly with Saddam Hussein over the status of United Nations weapons inspections**, winning a temporary respite in the long battle of wills with the West but raising questions about his decision to shake hands — and even smoke cigars — with the dictator.

4. **In February 2012, Mr. Annan was appointed as the joint envoy of the Arab League** and the United Nations to seek a settlement as civil war tightened its grip on Syria. But he resigned in frustration in August of that year, citing the intransigence of both sides in a conflict that convulsed and reshaped the region and claimed hundreds of thousands of lives.

5. **Kofi Atta Annan was born on April 8, 1938, in the city of Kumasi in what was then Gold Coast** and which, in 1957, became Ghana, the first African state to achieve independence from British colonialism.

6. Born into an aristocratic family, he had three sisters, two of them older. The third, Efua, was a twin who died in the 1990s.

7. **In 1965, he married Titi Alakija, a woman from a prosperous Nigerian family**. The couple had two children, a daughter, Ama, and a son, Kojo. The marriage foundered in the late 1970s.

FORTUNE'S 'CHANGE THE WORLD' LIST

Richest Indian **Mukesh Ambani's telecom unit Reliance Jio** has been ranked as the **top company globally on Fortune's 'Change The World' list** that ranked companies using the profit motive to help the planet and tackle social problems. **Jio is ranked ahead of pharma giant Merck and Bank of America**, according to Fortune list released on 20 August 2018.

What

1. **Chinese group Alibaba is ranked 5th on the list** that has food and drug stores Kroger at number six, industrial machinery firm ABB at number 8 and network and communications giant Hughes Network System at number 10.

2. If access to the Internet is a basic human right -- and the United Nations declared it one in the summer of 2016 -- then Reliance Jio deserves more credit than most for expanding access to it.

3. **Jio** stormed the sector with free calls and data forcing rivals to merge or exit in **September 2016** and has amassed 215 million subscribers since then and says it is profitable.

4. Fortune said the Change the World list recognizes companies that have had a positive social impact through activities that are part of their core business strategy.

5. Considering only companies with **annual revenues of $1 billion or more**, the list measures social impact, business results (profitability), the degree of innovation and corporate integration.

INDIA'S FIRST WOMEN WRESTLING GOLD IN ASIAD

Vinesh Phogat on 20 August 2018 created history by becoming the **first Indian woman wrestler to win a gold medal** at the Asian Games, brushing aside her rivals with remarkable ease in the **50kg category** in Jakarta. **Vinesh was a medal-favourite in her category** and was likely to face stiff competition from Japan's Yuki Irie whom she outplayed 6-2 in the final.

What

1. It is surely a ground-breaking achievement for **the 23-year-old firebrand Haryana wrestler**, who is connected to Dangal-famed Phogat family.

2. **Vinesh's semifinal lasted just 75 seconds** as she moved into the final with a 'fitley'. She was already up 4-0 and then rolled over her opponent thrice with leg-lock.

3. The gold also enabled Vinesh to achieve another feat as she became the only woman wrestler to win two medals in back-to-back Asian Games.

4. **Vinesh had earlier won a bronze medal in the 48kg category at the 2014 Incheon Asian Games**.

5. Vinesh also won back-to-back gold medals in Glasgow and Gold Coast Commonwealth Games this year.

> **Flashback**
> 1. **The 2018 Asian Games**, officially known as the **18th Asian Games and also known as Jakarta Palembang 2018**, is a pan-Asian multi-sport event being held from 18 August to 2 September 2018 in the **Indonesian cities of Jakarta and Palembang**.
> 2. **For the first time, the Asian Games are being co-hosted in two cities**; the Indonesian capital of Jakarta (which is hosting the Games for the first time since 1962), and Palembang, the capital of the South Sumatra province.
> 3. Events will be held in and around the two cities, including venues in Bandung and province of West Java and Banten. The opening and closing ceremonies of the Games will be held at Gelora Bung Karno Main Stadium in Jakarta.
> 4. **Also for the first time, eSports and canoe polo** will be contested as demonstration sports.
> 5. eSports is expected to be a medal event at the 2022 Asian Games.

INDIA'S FIRST HUMBOLDT PENGUIN DIES

Barely a week after it was hatched at the Veermata Jijabai Bhosale Udyan va Pranisangrahalaya popularly known as **Byculla zoo**, **India's first Humboldt penguin died** on 22 August 2018 night. Preliminary examination during the **post-mortem revealed that there were new born anomalies** like yolk sac retention and liver dysfunction which is said to be the major cause of the **baby penguin's death**.

What

1. **The post-mortem was conducted by a team of doctors from Bombay Veterinary College** on 23 August 2018 morning.

> **Flashback**
> 1. The **Humboldt penguin (Spheniscus humboldti)** is a **South American penguin that breeds in coastal Chile and Peru**.
> 2. Its nearest relatives are the African penguin, **the Magellanic penguin and the Galápagos penguin**.
> 3. The penguin is named after the cold water current it swims in, which is itself named after Alexander von Humboldt, an explorer.
> 4. **The species is listed as Vulnerable by the IUCN**

2. **The Humboldt penguin was born on August 15 at 8.02pm**. It weighed 75 grams at birth and was healthy, zoo officials had said.

3. Molt and Flipper took excessive care of the young one. The mother -Flipper- is the oldest in the colony of penguins, while Molt was the youngest.

FIRST NATIONAL CSR AWARDS

Ministry of Corporate Affairs invites entries for nominations for the **first National CSR Awards only from Ministries/ Departments of Govt of India, State & Union Territories (UT) Governments and Professional institutions**: ICSI, ICAI, ICMAI and National Level Trade and Industry Chambers only. A nominating organisation can nominate up to a total of **10 entries in all categories of Awards**. Companies may directly submit their application/s in a suitable category to these organisations. Last date for submission of applications and nominations is 30th September 2018. **There are a total 20 number of**

prizes for National CSR Awards. The companies will be contesting in the award process having **3 categories are as follows:**

1. Corporate Awards for Excellence in CSR:
2. Corporate Awards in CSR in Challenging Circumstances:
3. Upto 11 Awardees to be chosen based on contribution to National Priority Schemes so as to motivate corporates to spend in these areas. National Priority Areas, as reflected through important schemes of Government of India.

What

1. **Ministry of Corporate Affairs (MCA), Government of India has instituted National CSR Awards 2018** to recognize corporate initiatives in the area of Corporate Social Responsibility (CSR) to achieve inclusive growth along with inclusive and sustainable development.
2. Indian Institute of Corporate Affairs (IICA) is rendering technical and logistics support to the Ministry in conduct of the Awards.
3. **With the enactment of Companies Act, 2013** containing the CSR provision under Section 135, the mandate for CSR has now become a part of corporate functioning in the country.
4. While several companies have traditionally been undertaking CSR activities to betterment of communities around, with the introduction of legislative mandate, the contributions of companies in this direction are now becoming more streamlined.
5. The framework laid down under the Section 135 along with rules therein, **the CSR mandate under the Act is an attempt to infuse corporate innovations in the form of approach**, usage of technology, expertise etc to developmental challenges faced by the country.
6. CSR Projects undertaken by companies are expected to throw up innovative solutions to specific problems in the domains of social, economic and environmental challenges.

NEW CHIEF OF DRDO

The government appointed missile scientist **G Satheesh Reddy as chairman of Defence Research and Development Organisation (DRDO)**, nearly three months after the post fell vacant following the retirement of **Selvin Christopher in May**.

What

1. **Reddy will hold the post for two years**. It was being looked after by Defence Secretary Sanjay Mitra as additional charge.
2. **Reddy was holding the post of**

Flashback

1. **DRDO was formed in 1958** from the amalgamation of the then already functioning **Technical Development Establishment (TDEs) of the Indian Army** and the **Directorate of Technical Development & Production (DTDP)** with the **Defence Science Organisation (DSO)**.
2. DRDO was then a small organisation with 10 establishments or laboratories. Over the years, it has grown multi-directionally in terms of the variety of subject disciplines, number of laboratories, achievements and stature.
3. **Today, DRDO is a network of more than 50 laboratories which are deeply engaged in developing defence technologies** covering various disciplines, like aeronautics, armaments, electronics, combat vehicles, engineering systems, instrumentation, missiles, advanced computing and simulation, special materials, naval systems, life sciences, training, information systems and agriculture.
4. Several major projects for the development of **missiles, armaments, light combat aircrafts, radars, electronic warfare systems** etc are on hand and significant achievements have already been made in several such technologies.

scientific advisor to the Raksha Mantri and heading the strategic missile systems division of the DRDO.

3. **The missile system division is in-charge of developing strategic delivery systems** such as the Agni series and other nuclear-capable missiles for the country.

INDIA GETS ITS FIRST LED CINEMA SCREEN

Marking a shift from theatre projection systems to LED screens, **India got its first LED cinema screen** on 27 August 2018 with the launch of **Samsung Cinema LED Onyx at PVR in New Delhi**. Boasting of a **high dynamic range (HDR) picture quality** and an infinite contrast ratio, the Samsung LED screen makes watching 3D movies more realistic through enhanced brightness and consistent colour amplification.

What

1. **India is a film-loving country**. Our movies are full of vibrant colours and rich music. **Onyx Cinema LED will be the true solution for such content** and we believe this technology will be a 'blockbuster' in the film industry. It is going to revolutionize the movie viewing experience," said Samsung India.

2. The new technology was unveiled last year by Samsung after which the company now plans to roll out the LED screens in different cities of India in association with two leading multiplex chains — PVR and Inox.

3. **PVR's joint managing director Sanjeev Kumar Bijli said with its property at Vasant Kunj, PVR has become the first cinema exhibition chain in the country** to introduce this disruptive theatre technology for Indian movie-goers.

Flashpoint

1. **The first HDR & DCI Certified 4K LED technology** aims **to amplify audiences' experience with its futuristic features** -- Onyx View, Onyx 3D and Onyx Sound.

2. The display system works with any venue configuration without compromising on visual quality. It claims to be a superior technology than traditional projectors.

3. **The 3D Onyx Cinema LED screen ensures that you can see even minor visual details** with unprecedented clarity, making it easier to read subtitles even with your 3D glasses unlike the existing movie theatre projection system.

4. **The screen delivers High Dynamic Range (HDR) to the cinema**, showcasing on-screen content at peak brightness level - nearly 10 times greater than that offered by standard cinema projectors (146 fL versus 14 fL). The display delivers improved uniformity, free of optical distortion and interference.

5. The screen maintains its advanced presentation capabilities in **ambient lighting conditions**, regardless of the featured on-screen content. It also accommodates users who wish to utilize their theatres for corporate events, concerts and sports event viewing, and gaming competitions.

6. For the sound system, **the LED screen comes with state-of-the-art Onyx surround sound experience from JBL by Harman International** and Samsung's Audio Lab. Samsung says the technology expands the audio "sweet spot" while ensuring that all attendees can enjoy the same experience regardless of seat location within the theatre.

SC/ST CAN'T CLAIM BENEFITS IN ANOTHER STATE

The **Supreme Court** on held that a member of a **Scheduled Caste and Scheduled Tribe community** cannot claim the **benefit of reservation in government employment in other states** if his or her **caste is not notified there**. A five-judge Constitution bench headed by Justice Ranjan Gogoi unanimously held that **a person belonging to Scheduled Caste in one state cannot be deemed to be a Scheduled Caste in other states** where he migrated for the purpose of employment or education.

What

1. The bench, which also comprised Justices N V Ramana, R Banumathi, M Shantanagoudar and Justice S A Nazeer, held "**A person notified as Scheduled

Caste in state A cannot claim the same status in another state on the basis that he is declared as Scheduled Caste in state A."

2. **The bench with a majority of 4:1 held that so far as Delhi is concerned**, the central reservation policy regarding SC/ST would be applicable here.

3. The verdict came on a batch of petitions that **had raised the issue whether a SC/ST in one state can seek reservation in another state** where his caste is not notified as SC/ST.

4. The bench was also seized of the question whether SC/ST people of other state can seek quota benefits for government jobs in Delhi.