

My Notes....

NATIONAL

INTER-STATE COUNCIL RECONSTITUTED

The **Inter-State Council**, which is mandated to investigate and advise on disputes between states, has been reconstituted with **Prime Minister Narendra Modi** as its **chairman** and six Union ministers and all chief ministers as members. Chief ministers of all states and Union territories having legislative assemblies will also be members of the council.

What

- Eight other Union ministers** have been made permanent invitees to the council.
- The Article 263** of the Constitution provides for the establishment of an Inter-State Council which is mandated to inquire into and advise upon disputes which may arise between states, investigate and discuss subjects in which some or all of the states, or the Union and one or more of the states, have a common interest.
- It is also tasked with giving recommendations on any such disputes and recommendations for the better coordination of policy and action.

Standing committee reconstituted

- The government reconstituted the standing committee of **the Inter-State Council** with the **chairmanship of Home Minister Rajnath Singh**
- Four Union ministers** and seven chief ministers are members of the new standing committee of the council.
- The standing committee will have consultation and recommend matters for consideration of the council, process all matters pertaining to Centre-state relations before they are taken up for consideration in the council.
- It will also monitor the implementation of decisions taken on the recommendations of the council and consider any other matter referred to it by the council.
- The standing committee may, if necessary, invite experts and persons eminent in specific fields to have the benefit of their views while deliberating upon the related subjects.

GENDER GAP INDEX 2017

India slipped 21 places on the World Economic Forum's Global Gender Gap index to 108 behind neighbours **China and Bangladesh**, primarily due to less participation of women in the economy and low wages. Moreover, India's latest ranking is **10 notches** lower than its reading in 2006 when the WEF started measuring the gender gap.

According to Report

- India has closed 67 per cent of its gender gap**, less than many of its international peers, and some of its neighbours like Bangladesh ranked 47th while China was placed at 100th.
- Globally also, this year's story is a bleak one. For the first time since the WEF began **measuring the gap across four pillars — health, education, the workplace and political representation** — the global gap has actually widened. A decade of slow but steady progress on improving parity between the sexes came to a halt in 2017, with the global gender gap widening for the first time since the **WEF's Global Gender Gap Report was first published in 2006**.
- The findings in this year's report, published on 2 November 2017, showed that **an overall 68 per cent of the global gender gap has been closed**. This is a slight deterioration from 2016 when the gap closed was 68.3 per cent. At the current rate of progress, the global gender gap will take 100 years to bridge, compared to 83 last year.

4. The case is worse in terms of **workplace gender divide, which the report estimates will take 217 years to close.**
5. On a positive note, however, a number of countries are bucking the dismal global trend as over one-half of all 144 countries measured this year have seen their score improve in the past 12 months, the report noted.
6. **At the top of the Global Gender Gap Index is Iceland.** The country has closed nearly 88 per cent of its gap. It has been the world's most gender-equal country for nine years. Others in the top 10 include Norway (2nd), Finland (3rd), Rwanda (4) and Sweden (5), Nicaragua (6) and Slovenia (7), Ireland (8), New Zealand (9) and the Philippines (10).

7. **India's greatest challenges lie in the economic participation and opportunity pillar** where the country is ranked 139 as well as health and survival pillar where the country is ranked 141.

8. The report attributed much of **India's decline in position on the overall Global Gender Gap Index** to a widening of its gender gaps in political empowerment as well as healthy life expectancy and basic literacy. With more than 50 years having passed since the inauguration of the **nation's first female prime minister in 1966**, maintaining its global top 20 ranking on the political empowerment sub-index will require India to make progress on this dimension with a new generation of female political leadership.

9. In India, **the workplace gender gap is reinforced by extremely low participation of women in the economy** (136 out of the total 144 countries covered) and low wages for those who work (136th ranking for estimated earned income), the WEF said, adding that **"on average, 66 per cent of women's work in India is unpaid**, compared to 12 per cent of men's".

10. On a positive note, **India succeeded in fully closing its primary and secondary education enrolment gender gaps for the second year running** and for the first time has nearly closed its tertiary education gender gap. However, it continues to rank fourth-lowest in the world on health and survival, remaining the world's least-improved country on this sub-index over the past decade.



Global Nutrition Report 2017

India is facing a serious burden of under-nutrition, according to a global report released on 6 November 2017 which shows that **more than half the women of reproductive age in the country suffer from anaemia.** The **Global Nutrition Report 2017**, which looked at 140 countries including India, found 'significant burdens' of three important forms of malnutrition used as an indicator of broader trends. These include **childhood stunting, anaemia in women of reproductive age, and overweight adult women.** Latest figures show that **38 per cent of children under five are affected by stunting** — children too short for their age due to lack of nutrients, suffering irreversible damage to brain capacity.

What

1. About 21 per cent of children under 5 are defined as 'wasted' or 'severely wasted' — meaning **they do not weigh enough for their height**.
2. Over half of women of reproductive age — 51 per cent — suffer from anaemia — a serious condition that can have long-term health impacts for mother and child.
3. **More than 22 per cent of adult women are overweight**, a rising concern as women are disproportionately affected by the global obesity epidemic, according to the report.
4. While the country has shown some progress in addressing **under-5 stunting**, it has made no progress or presents worse outcomes in the percentage of reproductive-age women with anaemia, and is off course in terms of reaching targets for reducing adult obesity and diabetes, the report said.
5. The Global Nutrition Report highlights that **the double burden of under-nutrition and obesity needs to be tackled as part of India's national nutrition strategy**.
6. **For under-nutrition, especially, major efforts are needed to close the inequality gap**, said Menon, Senior Research Fellow in the International Food Policy Research Institute (IFPRI)'s South Asia Office in New Delhi.
7. The Global Nutrition Report 2017 calls for **nutrition to be placed at the heart of efforts to end poverty, fight disease, raise educational standards** and tackle climate change.
8. **In India, 16 per cent of adult men and 22 per cent of adult women are overweight**.

India Youth Development Report 2017

The Union Ministry of Youth Affairs and Sports has released **India Youth Development Index (IYDI) and Report 2017** to track the trends in Youth Development across the States. The Index has been developed by **Rajiv Gandhi National Institute of Youth Development (RGNIYD)**, Sriperumbudur, Tamil Nadu.

What

1. The **India Youth Development Index** will enable to recognize high and low performing states, identify weak domains and inform the policy makers the priority areas of intervention for youth development in the states.
2. It was constructed using latest definition of youth as used in **National Youth Policy 2014** and **World Youth Development Report of Commonwealth (15-29 years)** as well as using the Commonwealth Indicators in order to facilitate Global comparison.
3. In IYDI 2017, the **first five dimensions are retained same as that of Global YDI**.
4. The indicators and weights were modified based on availability of data at sub-national level and importance of indicators in explaining Youth Development with the aim of capturing the multidimensional properties that indicate progress in youth development at state level.

Flashpoint

1. **YDI for India adds a new domain, social inclusion** to assess inclusiveness of societal progress as structural inequalities persist in Indian society.
2. Its construction will help to identify gaps that require intensification of policy intervention.
3. The index also **measures achievements made besides serving as advocacy tool** for youth development and facilitates to identify priority areas for development of Policy and Interventions.
4. The report has immense value to enable comparisons across geographical areas and categories as **human development index (HDI)** has done in comparing development situation across regions, nations and localities.

Gender Vulnerability Index

Delhi came in just two positions shy of being the worst state when it comes to safety of girls and women, faring better only than Bihar and Uttar Pradesh, while Goa topped the list, shows a newly-formed Gender Vulnerability Index by NGO Plan India. The GVI attempts to "generate a normative consensus" on status of girls and women in India and takes into account four core dimensions: Education, health and survival, poverty, protection.

What

1. For each dimension and GVI, state-wise ranking has been provided, with Goa coming in at rank one, followed by Kerala at rank two, Mizoram in the third position, Sikkim at fourth, and Manipur at rank five.

2. At rank 28, Delhi fares among the bottom five, with Bihar faring the worst at rank 30, followed by Uttar Pradesh (29), Jharkhand (27), and Arunachal Pradesh (26).

3. According to the index, with a GVI score of 0.436, Delhi fares so poorly because "education in Delhi is the poorest among the 30 states" and the "protection ranks poorly as well".

TOP FIVE STATES AND POINTS		EDUCATION	
Goa	0.66	BEST Himachal Pradesh, Sikkim, Punjab, Maharashtra, Goa	
Kerala	0.63	WORST Delhi, Arunachal Pradesh, Jharkhand, Meghalaya, Madhya Pradesh	
Mizoram	0.63		
Sikkim	0.61		
Manipur	0.61		
BOTTOM 5/POINTS		HEALTH	
26 Arunachal Pradesh	0.45	BEST Kerala, Tamil Nadu, Sikkim, Karnataka, Andhra Pradesh	
27 Jharkhand	0.45	WORST Bihar, Haryana, Jharkhand, Meghalaya, Uttar Pradesh	
28 Delhi	0.44		
29 Uttar Pradesh	0.43		
30 Bihar	0.41		
Source: Plan India		POVERTY	
		BEST Manipur, Mizoram, Tamil Nadu, Telangana, Andhra Pradesh	
		WORST Bihar, UP, Jammu & Kashmir, Assam, Jharkhand	

4. Delhi came in at the last rank, at 30, in terms of education and at the third-last rank, at 28, when it comes to protection. Under the poverty and health dimensions, Delhi was said to have "unsatisfactory performance".
5. In Bihar, girls and women are "most vulnerable and their position is acute". With their state garnering the lowest GVI score of 0.410, they are the unhealthiest and poorest among their peers across the country.
6. Referring to the top-ranked states, the index shows that at rank one, Goa (GVI of 0.656) came in first in terms of protection, fifth for education, sixth for health and survival, and eighth for poverty.
7. Kerala's second rank, with a GVI score of 0.634, "comes from excellent achievements in the health dimension".
8. The GVI has analysed the situation of girls and women in the country on the four dimensions and developed a multidimensional composite index with over 170 indicators.
9. This index will be useful in understanding the situation in states, as it ranks each state in every dimension of gender vulnerability.

ETIKOPPAKA TOYS GET GI TAG

The Geographical Indication Registry (GIR) has given Geographical Indication (GI) tag traditional Etikoppaka toys (Etikoppaka Bommalu) from Andhra Pradesh. These traditional toys are made by artisans in Etikoppaka village located on banks of river Varaha in Visakhapatnam district of the state. With this, Etikoppaka toys join elite products from Andhra Pradesh such as Kondapalli toys, Tirupati laddu, Bobbili Veena, Srikalahasthi Kalamkari, Uppada Jamdani sarees and Shadow puppets to have coveted GI tag.

What

1. The art of making traditional wooden Etikoppaka toys is more than 400 years old and it has been traditionally handed over to them by their ancestors through generations.

2. The art of this toy making is also known as turned wood Lacquer craft.
3. **The toys are unique in shape and form.** They are made of wood and painted with natural dyes.
4. **The wood used is from 'Ankudi Karra'** (Wrightia tinctoria) tree that is soft in nature.
5. The natural dyes are prepared from seeds, lacquer, bark, roots and leaves.
6. These dyes are unique as they do not have heavy metal or toxic content in it.

AMENDMENT IN THE NCTE ACT, 1993

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has given its **approval for introduction of a Bill in Parliament to amend the National Council for Teacher Education Act, 1993**, namely the **National Council for Teacher Education (Amendment) Act, 2017** to grant retrospective

recognition to the Central/State/Universities who are found to be conducting teacher education courses without NCTE permission.

What

1. **The amendment seeks to grant retrospective recognition to the Central/State/Union Territory funded Institutions/Universities** conducting Teacher Education Courses without NCTE recognition till the academic year 2017-2018.
2. The **retrospective recognition** is being given as a onetime measure so as to ensure that the future of the students passed out/enrolled in these institutions is not jeopardized.
3. The amendment will make students studying in these Institutions/Universities, or already passed out from here, eligible for employment as a teacher.

About GI

1. The **Geographical Indication (GI)** is name or sign used on certain products which correspond to specific geographical location or origin.
2. **It is used for agricultural, natural and manufactured goods** having special quality and established reputation.
3. These goods and products having tag are recognised for their origin, quality and reputation and gives it required edge in the global market.
4. It also ensures that none can use their name, giving them exclusivity.
5. The registration of a GI is **valid for 10 years after which it needs to be renewed.**
6. GI is covered as element of **intellectual property rights (IPRs)** under Paris Convention for Protection of Industrial Property.
7. At international level, **GI is governed by WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).**
8. In India, GI tag is governed by **Geographical Indications of Goods (Registration and Protection Act), 1999.**
9. This Act is administered by Controller General of Patents, Designs and Trade Marks, who is also Registrar of Geographical Indications.

Background

1. The **NCTE Act, 1993 came into force on 1st July, 1995** and is applicable throughout the country, except the State of Jammu and Kashmir.
2. The **main objective of the Act is to provide for the establishment of a NCTE to achieve planned and coordinated development of the teacher education system**, regulation and ensure proper maintenance of norms and standards in the said system.
3. In order to achieve the objectives of the Act, separate provisions have been, made in the Act, for recognising Teacher Education courses and to lay down guidelines for compliance by recognized Institutions/Universities.

With a view to achieve above mentioned benefits, Deptt. Of School Education & Literacy, Ministry of Human Resource Development has brought about this amendment.

4. **All institutions running Teacher Education Courses such as B.Ed. and D.El.Ed. have to obtain recognition from the National Council for Teacher Education under section 14** of the NCTE Act. Further, the courses of such recognised Institutions/Universities have to be permitted under section 15, of the NCTE Act.
5. NCTE wrote to all Central Universities and /State Obvernrrnents / State Universities / District Institutes of Education and Training (DIETs) informing them about the legal provisions making it mandatory to seek prior permission for starting Teacher Education Courses and giving them time till 31-03-2017 to inform NCTE if any such Institution/University is running a course without permission of NCTE, for a one-time resolution of past issues.

RULES TO REGULARISE USE OF DRONE

India on 1 November 2017 came out with a draft **set of guidelines to bring the use of drones and other unmanned aerial vehicles under a legal framework**. This is likely to **encourage the commercial use of such products**. In the absence of any guidelines, the amateur use of drones has so far been illegal. **E-commerce major Amazon** has used a drone to deliver a bag of popcorn to an address in rural England, in the **first commercial outing for a technology** that is the US group's boldest step towards automating deliveries.

What

1. According to **the policy unveiled by the Directorate General of Civil Aviation (DGCA)**, which will be the regulating agency for such vehicles, drones have been classified into four parts based on their weight.
2. For the lightest category Nano, **a payload of up to 250 grams and flight to a maximum height of 50 feet**, a one-time registration for the operating agency is enough. However, for equipment which is more than 2 kg the operator has to get security clearance each time the drone is operated. The operator should also have a special permit, which the government has assured will be sanctioned within two to seven days.
3. **Regulation of drones is a very difficult prospect in a country like India**. It has extensively pondered over the security aspect and consulted global examples.
4. This is a very progressive policy which will increase the ease of doing business for drones, Jayant Sinha, minister of state for civil aviation said.
5. After stakeholder consultations, the final and **formal Civil Aviation Requirements (CAR) for drones are expected to be in place by December end**.
6. Various restrictions have been proposed to ensure that the drones are used only for valid purposes. For instance, areas under 50 kilometres from the international border would be designated 'no drone zones'.
7. **Currently, aircraft rules do not cover the use of drones as well as their sale and purchase**. Aviation regulator DGCA had in October 2014 restricted the use of drones and unmanned aircraft system by civilians.
8. **India is not the first country to do so**. The US tightened its rules on drones after a man was caught trying to fly a drone over the walls of the White House, in March last year.
9. Now, drones or unmanned aircraft are being used for several purposes such as mapping, survey and commercial photography, while e-commerce giant Amazon is looking to use them for deliveries to its consumers in the US.
10. However, drones are also viewed as a security risk. **The International Air Transport Association has referred to drones as a threat in airspace** and called for a greater stakeholder engagement to ensure safety.

PRABAL DOSTYK 2017

The bilateral military exercise “**PRABAL DOSTYK – 2017**” between **India and Kazakhstan** began at Bakloh, Himachal Pradesh. ‘Prabal Dostyk’ means ‘**Robust Friendship**’

It is **second edition of the joint military training exercise** between both countries. The first edition of exercise was held in Karaganda region of Kazakhstan in **September 2016**.

What

1. The **fourteen day joint training aims to build and promote bilateral army-to-army relations** and exchange skills and experiences between **Kazakhstan and the Indian Army**.
2. It also aims at enhancing military ties between two countries for achieving interoperability between two armies.
3. The exercise will help in **strengthening ties between two countries** and would serve as platform for exchange of drills and procedures leading to seamless interoperability.
4. The training contingents comprise of platoon strength from the 11th Gorkha Rifles of Indian Army and similar strength of Kazakhstan Army.

CREATION OF NTA APPROVED

The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved **creation of National Testing Agency (NTA) as a Society registered under the Indian Societies Registration Act, 1860**, and as an autonomous and self-sustained premier testing organization to conduct entrance examinations for higher educational institutions.

Features

1. The **NTA would initially conduct those entrance examinations which are currently being conducted by the CBSE**.
2. Other examinations will be taken up gradually after NTA is fully geared up.
3. The **entrance examinations will be conducted in online mode** at least twice a year, thereby giving adequate opportunity to candidates to bring out their best.
4. In order to serve the requirements of the rural students, it would locate the centres at sub-district/district level and as far as possible would undertake hands-on training to the students.

Background

1. In view of the need to have a **specialized body in India like the most advanced countries**, the Finance Minister in the Budget speech of 2017-18 had announced setting up of a National Testing Agency (NTA) as an autonomous and self-sustained premier testing organization to conduct all entrance examinations for higher educational institutions.

Constitution

1. NTA will be chaired by an **eminent educationist appointed by MHRD**.
2. The CEO will be the Director General to be appointed by the Government.
3. There will be a Board of Governors comprising members from user institutions.
4. The Director General will be assisted by **9 verticals headed by academicians/experts**.

Finances

1. **NTA will be given a one-time grant of Rs.25 crore from the Government of India** to start its operation in the first year. Thereafter, it will be financially self-sustainable.

Impact

1. **Establishment of NTA will benefit about 40 lakh students** appearing in various entrance examinations. It will relieve CBSE, AICTE and other agencies from responsibility of conducting these entrance examinations, and also bring in high reliability, standardized difficulty level for assessing the aptitude, intelligence and problem solving abilities of the students.

INDIA RE-ELECTED MEMBER OF UNESCO'S EXECUTIVE BOARD

India was re-elected as member of executive board of **United Nations educational, scientific and cultural organization (UNESCO)**. Executive board is UNESCO's top decision-making body. The election was held at 39th session of General Conference of UNESCO in Paris, France.

What

1. **UNESCO's General Conference** consists of representatives of States Members of organisation. **It meets every two years.**
2. It is attended by Member States and Associate Members, together with observers for non-Member States, intergovernmental organisations and non-governmental organisations (NGOs).
3. The General Conference determines policies and main lines of work of organisation.
4. Its duty is to set programmes and budget of UNESCO.
5. **It also elects members of executive board and appoints, every four years, director-general.**

About UNESCO

1. **UNESCO is UN organization** that helps preserve historical and cultural sites worldwide.
2. **It is special multi-country agency, formed in 1945** and based in France.
3. It promotes literacy and sex education as well as improving gender equality in countries around world.
4. It is also known for recognising world heritage sites and work to preserve cultural and heritage sites such as ancient ruins, villages and temples, and historic sites.

GOVERNMENT TWEAKS RKVY SCHEME

Cabinet Committee on Economic Affairs on 1 November 2017 **approved the continuation of Rashtriya Krishi Vikas Yojana (RKVY) as Rashtriya Krishi Vikas Yojana- Remunerative Approaches for Agriculture and Allied sector Rejuvenation (RKVY-RAFTAAR) for three years -- 2017-18 to 2019-20.** The financial allocation of the scheme will be Rs. 15,722 crore **with the objective of making farming a remunerative economic activity** through strengthening the farmer's effort, risk mitigation and promoting agri-business entrepreneurship.

What

1. The **RKVY-RAFTAAR funds would be provided to the States as 60:40 grants** between Centre and States (**90:10 for North Eastern States and Himalayan States**).
2. The streams that will be funded include infrastructure & assets and production growth with 70 per cent annual outlay to be allocated to States as grants based for the activities such as infrastructure and assets **with 50 per cent of regular RKVY-RAFTAAR outlay**; value addition-linked production projects with 30 per cent of regular outlay; flexi-funds with 20 per cent of regular outlay.
3. **States can use this for supporting any projects as per the local needs.**
4. The other streams that will be funded are special sub-schemes of national priorities – 20 per cent of annual outlay; and innovation and agri-entrepreneur development through creating end-to-end solution, skill development and financial support for setting up the agri-enterprise -10 per cent of annual outlay including 2 per cent administrative costs.

5. **The scheme will incentivise states in enhancing more allocation to agriculture and allied sectors.** This will also strengthen farmer's efforts through creation of agriculture infrastructure that helps in supply of quality inputs, market facilities, etc.
6. This will further **promote agri-entrepreneurship** and support business models that maximise returns to farmers.

'CHINTAN SHIVIR' INAUGURATED

Union HRD Minister Shri Prakash Javadekar inaugurated a **two-day National Workshop 'Chintan Shivir' organized by Department of School Education and Literacy**, Ministry of Human Resource Development in New Delhi on 6 November 2017. The main aim of the workshop is **to provide holistic education relevant for 21st century India** and to bring together key stakeholders from **various NGOs, private sector and individuals to deliberate on key themes in the education sector.**

What

1. The workshop mainly focuses on **five themes** i.e. **Digital education, Life Skill education, Experimental learning, Physical Education and Value education.**
2. He envisaged 'Operation Digital Board' to be operational in all the schools of the country in the coming years. Government and various other organisations working in the field of education should do content corporation and **create a common digital platform to provide digital education for all the students of the country.**
3. The Minister further said life skill education and value education is the need of the hour and one must inculcate these attributes in his behavior for the holistic development.
4. The main aim of the education is to provide complete development of a person and to inculcate humanity in them. He said complete development involves development of human body, mind, wisdom and soul. He further said that human body can be developed by teaching physical education and wisdom can be gained by value education.
5. Union HRD Minister Shri Prakash Javadekar also launched a Compendium on 'Innovations and Best Practices in School Education' and a State-NGO-CSR Portal – '**Shaala Sarathi**' on the occasion.

WORLD CONGRESS OF MENTAL HEALTH

The President of India, Shri Ram Nath Kovind, **inaugurated the 21st World Congress of Mental Health being organised by the World Federation for Mental Health** in partnership with **Caring Foundation and other institutions in New Delhi** on November 2, 2017. Speaking on the occasion, the President said that the World Congress of Mental Health is taking place in **India for the first time.** And it has come at an appropriate moment. Mental health issues are acquiring a serious magnitude in our country. Our National Mental Health Survey 2016 found that close to 14 per cent of India's population required active mental health interventions.

What

1. The President noted that those living in metropolitan cities and those who are young – whether in the **productive age group, or children and teenagers** – are most vulnerable to mental illnesses.
2. In India, **we have a young population, with 65 per cent of our people below the age of 35.** And our society is rapidly urbanising. This leaves us staring at a possible mental health epidemic.
3. **The biggest obstacle that mental health patients have to encounter is stigma and denial.** This leads to the issue being ignored or simply not discussed.
4. A major gap in combating the mental health challenge **is that of human resources.** India is a country with 1.25 billion people but just 700,000 doctors – less than one million. In the field of mental health, the scarcity is even more

acute. There are only about 5,000 psychiatrists and less than 2,000 clinical psychologists in our country.

5. **India's National Mental Health Programme is building 22 centres of excellence in the field of mental health.** In parallel, the District Mental Health Programme has already covered 517 of the approximately 650 districts in India. It is taking the conversation about mental health to the grassroots of our society.
6. The World Congress will have **sessions on yoga, meditation and traditional approaches to mental health.**

TEST OF GUIDED BOMBS

Indigenously developed light weight Glide Bomb, **SAAW (Smart Anti Airfield Weapon)** was successfully tested from Indian Air Force aircraft in the ranges at ITR, Chandipur, Odisha. The guided bomb released from the aircraft and guided through **precision navigation system**, reached **the targets at greater than 70 km range**, with high accuracies.

What

1. **A total of three tests with different release conditions and ranges were conducted** and all were successful.
2. The guided bomb is developed by Research Centre Imarat (RCI), DRDO along with other laboratories of DRDO and Indian Air Force.
3. **SAAW will be inducted soon into the Armed Forces.**
4. It's a major milestone in the indigenous capabilities to develop guided bombs.

SAMPRITI 2017

Army personnel of **India and Bangladesh**, Asia's two of the most frequent witnesses to terror strikes, will engage in a joint counter-terrorist training exercise at India's **Jungle Warfare School at Vairengte in Mizoram** and at the **Joint Training Node at Umroi in Meghalaya** from next week.

What

1. **The Indo-Bangladesh joint training exercise, SAMPRITI 2017 in its seventh edition** will send a strong signal to the world that both India and Bangladesh understand the emerging threat of transnational terrorism and stand shoulder to shoulder united in countering this menace.
2. **Exercise SAMPRITI** is held alternately in India and Bangladesh every year with an aim to build and promote positive relations between the armies of the two neighbours.
3. **It also aims to enhance interoperability between the two nations** and enrich from each other's experience while carrying out counter-insurgency or counter-terrorism operations. **The previous edition was held at Tangail in Dhaka last year.**
4. This edition has two district components which include **Command Post Exercise (CPX)** and **Field Training Exercise (FTX)**.
5. The CPX will be conducted at Umroi over six days from November 6 to 11 whereas FTX will be conducted at Vairengte for 13 days from November 6 to 18.
6. There will be 20 officers each from both the armies in the CPX as part of brigade and battalion command posts.
7. The FTX would include the participation of one Infantry company each from the Bangladesh Army and elite Red Horns Division of the Indian Army.
8. **The CPX will focus on practicing joint planning** and conduct of counter-terrorist operations in semi-mountainous terrain with a special focus on drills and procedures followed while operating in dense jungles.

FIRST EVER APCERT CONFERENCE

The Indian Computer Emergency Response Team (CERT-In) under the aegis of **Ministry of Electronics & Information Technology** organizing the **Asia Pacific Computer**

Emergency Team (APCERT) Conference from November 12-15, 2017 in New Delhi. **This is the 15th Conference of APCERT and first ever conference in India** and South Asia and is expected to be attended by 21 economies.

What

1. The conference theme is "**Building Trust in the Digital Economy**". November 12-14 are closed for AGM and other APCERT meetings.
2. The open session including industry, academia, civil society and Government stakeholders will be held on November 15, 2017 at Hotel The Ashok, New Delhi.
3. This will be inaugurated by Shri Ravi Shankar Prasad, Hon'ble Minister of Electronics & Information Technology, and is expected to be attended by over 300 cyber security professionals from the **Asia Pacific region, USA, Europe, Industry, Academia, Government and Media**.
4. This conference would cover contemporary topics around strategies of CERTs, Technology and Instruments for building trust in digitally evolving economies and best practices for handling cyber security in mobile and social media.

JOINT DOCTRINE 2017

Chairman Chiefs of Staff Committee & Chief of the Naval Staff Admiral Sunil Lanba released '**Joint Training Doctrine Indian Armed Forces – 2017**'. **It is for the first time in the history of the Armed Forces** that such a **keystone document has been promulgated**. The document has been prepared in a '**collegiate manner**' involving **all the three Service Headquarters** and flowing from its mother and capstone Doctrine namely, **Joint Doctrine Indian Armed Forces -2017** released in April last.

What

1. **The aim of the Doctrine is to promote 'Synergy' and 'Integration' amongst the three Services** and other stake-holders leading to an enhanced efficiency and optimum utilisation of resources.
2. Besides numerous advantages of the Doctrines, this document will also go a long way in '**fostering initiative**' and '**stimulating creativity**' for promoting 'Integration' between the three Services in times to come.
3. The Doctrine brings out our approach to Joint training at macro-level, Fundamentals, Objectives, Joint Structures, Planning, Organisation amongst other aspects in existence and in use in the Armed Forces which have matured over **15 years of the existence of Headquarters Integrated Defence Staff (HQ IDS)**.
4. The concept includes '**Joint Training**' as a leverage for promoting '**Diplomacy**' and '**Civil – Military interface**' issues have also been highlighted in the document.
5. The recently concluded INDRA – 2017 and three Humanitarian and Disaster Relief Exercises held every year are some shining examples towards this end.
6. This key stone Doctrine will basically serve as a 'foundation' and 'knowledge base' from which specific Directives and Strategies will be issued by the Chairman Chiefs of Staff Committee to the HQ IDS and Service HQs to consolidate proven concepts, structures, mechanisms, capacities, capabilities, etc, from time to time.
7. Consequent to consolidation of Joint Training, this maiden Doctrine will be further developed **in due course as Doctrines are always 'unfinished products' being 'Evolving in nature'**, for ready reference as 'Distilled wisdom' and a 'Referral document' for the policy makers, armed forces personnel, academia, etc.

CAUVERY TRIBUNAL GETS EXTENSION

The Centre has given a six-month extension to the **Cauvery Water Disputes Tribunal (CWDT)** to submit its report on water sharing among **four states, including Tamil Nadu and Karnataka**. The next deadline for submission of report by the tribunal **would now be May 2, 2018**.

What

1. **The extension was notified by the water resources ministry** on the request of the tribunal which was earlier given time till November 2 to submit its report.
2. The sharing of waters of the Cauvery river **has been the source of a serious conflict between Tamil Nadu and Karnataka.**
3. **The tribunal was constituted on June, 2, 1990**, to adjudicate the water dispute. Kerala and Puducherry are the other two states party to the dispute.
4. After hearing concerns of all the four states concerned for over 16 years, the tribunal had finally in February 2007 announced its order allocating specified quantum of water to all four states.
5. **The Centre had notified the tribunal's award in 2013.** However, the states had then challenged the tribunal's order in the Supreme Court.
6. Tamil Nadu has been accusing Karnataka of not releasing its due share of water. Karnataka, on the other hand, has expressed its inability to release the stipulated quantum of water owing to scarcity in the state.

INDIA DISASTER RESPONSE SUMMIT

The Union Minister of State for Home Affairs, Shri Kiren Rijju was inaugurating the **India Disaster Response Summit**, organised jointly by the **National Disaster Management Authority (NDMA)** and **Facebook**, on **how best to leverage social media platforms to 'prepare, respond and recover' for, during and after a disaster.**

What

1. **This partnership is a benchmark and first of its kind** – we are the first Government to partner with Facebook on disaster response, he added.
2. The **efficacy of Disaster Management requires a well defined guideline and the role of media is vital** when disaster strikes and even in executing rescue and relief operations.
3. Collaboration with various stakeholders including NGO's and private players could provide the necessary base for response with a vision towards **'Capacity Building'** to handle disaster risk situation for addressing emergency rescue situations.
4. The Government will act as facilitator towards information and communication among various stakeholders by helping evolve new modes of communication for better contact between the **'Government and the People'**.
5. Introducing the **Disaster Information Volunteers (DIV) programme**, wherein a network of trained volunteers would provide supplementary information on disasters in their local communities to assist Government relief efforts through the Facebook Workplace platform, Facebook Head (Policy Programmes) for South Asia, Shri Ritesh Mehta said we are aiming to empower communities by building products that connect people and create positive social impact.
6. **The programme will be piloted in two disaster prone states - Assam and Uttarakhand.** Facebook will now share its disaster maps, developed using aggregated, de-identified data, with NDMA. These maps can aid swift disaster response by providing real-time, actionable information.

INTERNATIONAL

INDIA, RUSSIA INK A DEAL

India and Russia have signed an agreement for **granting visa-free entry** to pilots and crew members of chartered and scheduled flights between the two countries. The development comes ahead of Union Home Minister Rajnath Singh's long-pending visit to Moscow. This will mean that pilots and cabin crew members of airlines operating between the two countries will not require business visas. Instead, **they can be issued temporary landing permits (TLPs).**

What

1. Earlier, **the Indian mission used to issue visas for pilots/crew members for airlines operating between Russia and India.** The visas were issued within three days of submission of the visa application.
2. **The landing permit for sailors and crew members was curtailed in 2010** following reports of overstay and misuse of the facility — several foreigners from Russia and other erstwhile Soviet nations, availing TLP, were found to have settled in Goa later, officials claimed.
3. Under the Ministry of Home Affairs' (MHA) directives, **Indian missions abroad can grant business visas for appropriate duration to crew of non-scheduled airlines** and chartered flights, except in the case of nationals of Afghanistan, China, Ethiopia, Iran, Nigeria, Pakistan, Somalia and Sri Lanka, and foreign nationals of Pakistan origin.
4. MHA instructions for grant of TLP also state that permits to cabin crew and pilots of scheduled and unscheduled flights, as approved by the Ministry of Civil Aviation, may not be charged a fee for the grant of landing permits up to a period of seven days.

UN DEAL AGAINST COCAINE PRODUCTION

Colombia has signed a \$300 million agreement with the **UN aimed at reducing the production of cocaine.** According to the **UN Office on Drugs and Crime (UNODC)**, farmers who switch from growing coca, the raw material used to make cocaine, to safer crops will be compensated.

What

1. Speaking in Vienna, the head of the UNODC, Yury Fedotov, said: **“This historic agreement is a unique opportunity to turn the tide against Colombia’s coca cultivation** and help farmers embrace alternative development.
2. The pursuit of peace requires **tangible solutions to the crimes that fuel and feed conflict.**
3. Currently, farmers earn \$300 a month for every hectare of coca they grow. This initiative will provide compensation to farmers if they revert to producing safer crops, such as coffee and cacao, the UNODC announced.
4. **Colombia is ranked as one of the main drug-growing nations in the world by the UNODC.**

FIRST SHALE OIL SHIPMENT TO ARRIVE

India will receive its first cargo of shale oil, to be processed at an Indian Oil Corporation (IOC) refinery. This will be the second cargo of crude oil from the US, **the first one was conventional crude oil bought through PetroChina.** The shale oil cargo is expected to arrive on the west coast this month.

What

1. IOC had, on October 2, imported 12 million barrels of conventional crude oil, **the first shipment to India since the US stopped oil exports in 1975.**
2. The first cargo was conventional crude oil. The second cargo that will be reaching the west coast has shale oil.
3. According to the company, **the second cargo will land at Vadinar port in Gujarat** and will include one million barrels each of Eagle Ford and Mars shale crude oil grades.
4. The shale oil will be refined at one of IOC’s refineries in Gujarat, Panipat, or Agra. **The first cargo is being processed at the Paradeep refinery in Odisha.**
5. Indian companies have contracted close to 8 million barrels of crude oil for about \$450 million from the US. Apart from IOC, Bharat Petroleum Corporation (BPCL), and Hindustan Petroleum Corporation (HPCL) are set to source 2.95 million barrels and one million barrels, respectively, for their Kochi and Visakhapatnam refineries.

6. **India has begun to contract crude oil from the US as part of its strategy to diversify sourcing.** The Trump administration believes that US crude oil imports have the potential to increase bilateral trade by at least \$2 billion.

INDIA, PHILIPPINES INK DEALS

Philippines President Rodrigo Duterte expressed his desire to enhance **“defence cooperation” with India**, as he met Prime Minister Narendra Modi and the two sides signed a defence cooperation agreement. He was accompanied by five Cabinet-rank ministers from the Philippines side. He is also committed to improving the public health system and wants **Indian infrastructure companies to pitch in his flagship “build, build and build programme”**, Ministry of External Affairs’ Secretary (East) Preeti Saran said.

What

1. **Four agreements were signed between the two countries**, which covered areas of **defence, agriculture, small and medium enterprises and tie-up between think-tanks.**
2. Modi arrived in Manila on 12 November 2017 on a three-day visit to the Philippines, during which he will attend the **15th India-Association of Southeast Asian Nations (ASEAN) Summit** and the **12th East Asia Summit.**
3. **This is the first bilateral visit by an Indian PM to this Southeast Asian nation in 36 years** after the visit of then Prime Minister Indira Gandhi in 1981, though Prime Minister Manmohan Singh had visited Philippines in 2007 for the ASEAN summit.

APEC SUMMIT

The **Asia-Pacific Economic Cooperation (APEC) summit** was held in **Da Nang, Vietnam**. The theme of summit was **‘Creating New Dynamism, Fostering a Shared Future’**. Leaders of 21 Pacific Rim countries attended this meeting. **This was second time Vietnam hosted APEC summit**, having hosted the event previously in 2006. Next year’s APEC summit will be held in Papua New Guinea.

What

1. The summit laid **emphasis on collaborative activity**, such as provision of support for small businesses, promoting sustainable growth and deepening economic integration.
2. US and China, two economic powers in the region held opposing views on deepening economic integration.
3. China expressed support to further globalisation, US called for support to ‘fair trade’.

About APEC

1. It is regional economic forum of **21 Pacific Rim member economies** that promotes free trade throughout the Asia-Pacific region.
2. **These 21 member countries** collectively account for nearly 50% of world’s trade and about 57% of GDP.
3. **It was established in 1989** in order to leverage growing interdependence of Asia-Pacific region’s economies and promote free trade in the region. Its headquarters are in Singapore.
4. 21 Members Economies: Australia, Brunei, Canada, Indonesia, Japan, South Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, United States, Taiwan, Hong Kong, China, Mexico, Papua New Guinea, Chile, Peru, Russian and Vietnam. India is observer of APEC since 2011 and has applied for membership.

PANEL ON SINO-INDIA TIES

The parliamentary committee on external affairs plans to submit a comprehensive report on **Sino-Indian ties next year**, and is currently looking at the **“extremely topical” Doklam issue**, panel chairman **Shashi Tharoor** has said. Tharoor said the panel wanted to take a comprehensive look at the India-China ties by understanding **their trade and**

political relations, cooperation in international bodies and the **Chinese attitude on India's membership bid for the Nuclear Suppliers Group (NSG)**, on terrorism and Pakistan among other aspects.

What

1. Right now **the panel is looking at Dokalam because it is "extremely topical"**, the former minister of state for external affairs told.
2. Just as this year **we submitted to Parliament a report on Indo-Pakistan relations**, similarly for next summer we want to submit a report on Sino-Indian relations. The Parliamentary Standing Committee on External Affairs held two meetings on the Dokalam situation last month.
3. At the first meeting where the panel's members were **briefed by Foreign Secretary S Jaishankar**, Congress vice president Rahul Gandhi had raised questions on media reports of Chinese action in the Dokalam area, a member present at the meeting had said on the condition of anonymity.
4. The second meeting was briefed by Jaishankar, Home Secretary Rajiv Gauba and Defence Secretary Sanjay Mitra.
5. **The 73-day face-off between Indian and Chinese troops in Dokalam started on June 16** after the Indian side stopped the construction of a road by the Chinese Army. According to the external affairs ministry, **the two forces "disengaged" on August 28**. On the Dokalam standoff, Tharoor said if the Chinese had "stopped doing something" that had triggered the reaction from India, then "clearly we had achieved something".

UN CLIMATE CONFERENCE BEGINS

United Nations climate change conference to prepare a rule book to implement Paris Agreement began in Bonn on 6 November 2017 with India asking for including **pre-2020 actions of rich nations in the agenda for discussion**. India has also decided to conduct 'Yoga' session every evening in the country's pavilion to showcase its age-old tradition of sustainable lifestyle. The mega meet took off amid **alarming report of the World Meteorological Organisation's (WMO)** which says **the year 2017 is very likely to be one of the three hottest years on record**.

What

1. The State of the Climate report of the WMO, released on the **inaugural day of the Conference (COP23)**, says the average global temperature from January to September 2017 was approximately **1.1°C above the pre-industrial era**. "As a result of a powerful El Nino, 2016 is likely to remain the warmest year on record, with 2017 and 2015 being second and/or third", it says while noting that 2013-2017 is set to be the warmest five-year period on record.
2. Though **the Paris Agreement is meant for post-2020 climate actions** to keep the average global temperature rise within 2 degree Celsius by the end of this century, India's pitch for discussing pre-2020 actions assumes significance considering the recent 'emission gap' report of the **United Nations Environment Programme (UNEP)**.
3. **India's demand to put pre-2020 actions on the agenda of the COP23** will hopefully be accepted, the country's negotiator said.
4. **Under pre-2020 actions**, only developed countries - the historical polluters (developed countries) - are mandated to cut their emissions of greenhouse gases.
5. The Paris Agreement, on the other hand, says that all nations should take voluntary climate actions (as they had promised) under this global deal in December 2015.
6. The Conference (COP23) was kicked off with strong and unified calls to walk on the path of the Paris Agreement - especially when the US decision to withdraw from the global deal has already sent a negative signal to the world.

- Negotiators strongly believe that it would be practically impossible to meet the Paris goal without the US - the biggest historical polluter and the second largest current carbon emitter after China.

CHINA LAUNCHES 2 NAVIGATION SATELLITES

China, which is building its own navigation system to rival United States GPS, has launched two BeiDou-3 satellites into space through a single carrier rocket. The satellites were launched aboard a Long March-3B carrier rocket from Xichang Satellite Launch Center in the southwestern province of Sichuan. The two newly-launched satellites represent the third phase of the BeiDou Navigation Satellite System.

What

- This system will provide services for countries involved in the Belt and Road Initiative, and form a complete global satellite navigation system by 2020—by which time China plans to have more than 30 satellites.
- If everything goes according to the plan, China will become the third country in the world after the US and Russia to operate its own navigation system.
- Named after the Chinese term for the plough or the Big Dipper constellation, the BeiDou project was formally initiated in 1994. It began to serve China in 2000 and the Asia-Pacific region at the end of 2012.
- Compared to earlier generation satellites, the BeiDou-3 is able to send signals that are better compatible with other satellite navigation systems and provide satellite-based augmentation, as well as search and rescue services in accordance with international standards.
- New technology has significantly improved the performance of the BeiDou-3, with the signal accuracy in space higher than half a meter while its positioning accuracy has reached 2.5 to five meters.
- All the BeiDou satellites currently in space were sent up from Xichang Satellite Launch Center.
- The BeiDou-3 satellites and the carrier rocket were developed by China Academy of Space Technology and China Academy of Launch Vehicle Technology, respectively.

INDIAN OCEAN ASSN'S CENTRE

The Indian Ocean Rim Association (IORA), a platform of 21 countries bordering the Indian Ocean, is to set up a Centre of Excellence in Kochi. IORA is a regional forum of countries, tripartite in nature, bringing together representatives of the government, business and academia for promoting co-operation and closer interaction among Indian Ocean-bordering countries. Its headquarters is at Ebene, Mauritius.

What

- The opening of the IORA Centre of Excellence in Kochi is aimed at facilitating the exchange of research findings and studies in the field of fisheries and ocean studies among its member nations.
- IORA is considering Kerala University of Fisheries and Ocean Studies (KUFOS) as partner to set up the centre in Kochi. If the partnership proposal is executed, KUFOS' main campus, located at Panangad, near Kochi, will host the IORA Centre of Excellence.
- To evaluate the possibilities of establishing Centre of Excellence, an IORA delegation, comprising Sanjay Pande, Joint Secretary, Dept of Foreign Affairs and also the Indian chief of IORA, and Ashima Chaturvedi, Officer on Special Duty, visited KUFOS.
- The delegation held discussions with the researchers at KUFOS and teachers under the leadership of the Vice-Chancellor, A Ramachandran.
- The main objective of the proposed Centre of Excellence in Kochi is to assure that there is no duplication of efforts by member countries in the research and allied activity areas related to fisheries and ocean studies.

6. **The Centre of Excellence will be digitally linked with IORA's member countries** and researchers belonging to each member country can access data and information stored in the centre.

ECONOMY

FIRST CONSIGNMENT VIA CHABAHAR REACHES

The first consignment of wheat from India to Afghanistan, that was flagged off by External Affairs Minister Sushma Swaraj and her Afghan counterpart Salahuddin Rabbani on **October 29**, reached the Afghan city of Zaranj near the Iran-Afghanistan border on 11 November 2017 via the **Iranian port of Chabahar**, thereby bypassing Pakistan.

What

1. **The shipment to Afghanistan comes in the wake of Afghan President Ashraf Ghani's one-day visit to India on October 24.** India is a major development aid partner for strife-torn Afghanistan.
2. While flagging off the shipment on October 29, Sushma Swaraj also thanked Iran "for providing assistance in facilitating the movement of this **gift through Chabahar Port**".
3. This shows **the convergence between the ancient civilisations of India**, Afghanistan and Iran to spur unhindered flow of commerce and trade throughout the region.
4. **The shipment is part of a commitment made by India to supply 1.1 million tonnes of wheat** for the people of Afghanistan on a grant basis.
5. **This is the first shipment to go to Afghanistan through Chabahar** after the trilateral agreement to develop the port as a transport and transit corridor between India, Iran and Afghanistan were signed by Prime Minister Narendra Modi with Iranian and Afghan Presidents Hassan Rouhani and Ashraf Ghani, respectively, in May last year.

LEMOA IN PLACE

In a significant step forward in the **increasing military cooperation between India and the US**, a **US Navy tanker refuelled an Indian Navy ship in the Sea of Japan** this week. **This is the first time an Indian ship has been refuelled at sea by a US tanker**, an activity facilitated by operationalisation of the **Logistics Exchange Memorandum of Association (LEMOA)** between the two countries.

What

1. **INS Satpura, an Indian Navy stealth frigate**, was refuelled by **USNS John Ericsson, a US Navy tanker**, as Replenishment at Sea (RAS) activity carried out under **Exercise PASSEX (participation exercise)**.
2. Besides INS Satpura, INS Kadmatt and a Japanese Maritime Self Defence Force vessel, J S Inazuma, also participated in the exercise, which was conducted from November 3-6 in the Sea of Japan.
3. The refuelling from a US Navy tanker extends the reach of the Indian Navy, allowing it to operate further, more persistently and for a longer duration. It is also a statement of intent about the India-US relationship.
4. This PASSEX, which hoped **to build on Exercise Malabar between the three navies in July**, was requested by the Indian Navy, as per sources. A PASSEX like this arises when ships from two or more navies are operating in the same area and take the opportunity to train together.
5. During **Exercise Malabar, the two countries had first utilised the LEMOA to transfer fuel from INS Jyoti**, an Indian Navy tanker, to two US Navy ships. LEMOA was again used for accounting purposes during the training Exercise Yudh Abhyas in the US.
6. **India and the US signed LEMOA last August**, giving the militaries of both countries access to each other's facilities for supplies and repairs. The bilateral agreement was, however, operationalised earlier this year, once the two sides

exchanged the annexures listing the point of contacts and the authority chain to be followed.

7. **The refuelling of US ships during Malabar was part of a training exercise.** This PASSEX is more difficult and operational in nature.
8. This refuelling is more operational in nature and would not have been possible without LEMOA. But it was not meant to prove LEMOA; it was done for tactical reasons.
9. India and the US are working closely to sign the **Helicopter Operations on Ships Other than Aircraft Carriers (HOSTAC) agreement**, which will allow the two navies to land and take off from ships of both.
10. **The agreement was first proposed by the US Navy three years ago** but got an impetus during the maritime security dialogue between the two countries last May.
11. It was also discussed by US Defense Secretary James Mattis with Defence Minister Nirmala Sitharaman during his visit to Delhi in September.

PM'S ECONOMIC PANEL SUGGESTIONS

The **Economic Advisory Council to the Prime Minister (EAC-PM)** made a case for **incentivising states** for achieving results in sectors like health and education. The EAC-PM, headed by **Niti Aayog Member**, at its meeting took stock of the prevailing economic situation and spelt out "**a clear road map**" for stepping up skill development, job creation and enhanced resource investment in the social sector - including for health and education and boosting infrastructure financing. **It formulated far-reaching recommendations** to guide the evolving framework for the **Fifteenth Finance Commission**, including the incentivisation of states for achieving health, education and social inclusion outcomes.

What

1. The Council is also **evolving the design of a new 'Economy Tracking Monitor'**, linking economic growth indicators with social metrics for last-mile connectivity.
2. Presentations by experts were made to the Council on key themes, including infrastructure financing by Debroy.
3. He underlined the need for infrastructure financing to be accorded high priority, with new mechanisms for a risk coverage umbrella.
4. **The unique feature of the new Economic Advisory Council** to the Prime Minister is turning out to be its ability to link economic growth with social aspects, with greater last-mile connectivity," the release said.
5. Its "**value addition as an independent institutional mechanism**" for providing informed advice to the Prime Minister is increasingly being recognised.

BUSINESS OPTIMISM RANKING

India has slipped in 'business optimism' index to the 7th position in the September quarter, from the **2nd slot in the previous three months**, showing clear signs of lag in the economy, says a survey. **Indonesia is at the top**, followed by Finland (2nd), the Netherlands (3rd), Philippines (4th), Austria (5th) and Nigeria (6th), as per **Grant Thornton's International Business Report (IBR)**.

What

1. According to the quarterly global survey on business optimism, **Indian businesses have expressed low confidence over revenue expectations in the next 12 months.**
2. They also saw a drastic fall in confidence for profitability with 54 per cent showing optimism as against 69 per cent in the last quarter.
3. Other parameters like expectations of increase in selling prices and exports have also suffered a slight fall in optimism in this quarter.

4. There were clear signs of lag in the economy which caused the drop in ratings, **Grant Thornton India LLP Partner - India leadership** team Harish HV said.
5. However, the Government actions and reforms coupled with the significant jump in Ease of Doing Business Rankings should bring back optimism in Indian Business in the next few quarters.
6. **Indian businesses however remained optimistic about increase in employment as 54 per cent** respondents expressed the need to increase hiring in the next 12 months, a three- point rise from June quarter.
7. Other areas where the optimism remained intact were investment in plant and machinery and Research & Development (R&D).
8. According to IBR, **India tops the chart in citing regulations and red tape and lack of ICT infrastructure** as the biggest growth constraints with 69 per cent and 46 per cent voting for it respectively.
9. Indian businesses also identified shortage of finance and lack of skilled workforce as pain points of India Inc taking the 2nd and the 3rd spot respectively.
10. Globally, the overall position for business optimism remains relatively high at 49 per cent in the September quarter. This is down 2 pps on the June quarter, and follows five consecutive quarterly increases in business sentiment.
11. The IBR provides insight into the views and expectations of **more than 10,000 businesses per year across 36 economies**.

CHANGES RECOMMENDED IN COMPOSITION SCHEME

The changes were **recommended in the Composition Scheme on the basis of discussions** held in the **23rd meeting of the GST Council held at Guwahati**.

What

1. **Uniform rate of tax @ 1% under composition scheme** for manufacturers and traders (for traders, turnover will be counted only for supply of taxable goods). No change for composition scheme for restaurant.
2. **Supply of services by Composition taxpayer upto Rs 5 lakh per annum** will be allowed by exempting the same
3. **Annual turnover eligibility for composition scheme** will be increased to Rs 2 crore from the present limit of Rupees 1 crore under the law. Thereafter, eligibility for composition will be increased to Rs. 1.5 Crore per annum.
4. The changes recommended by GST Council at (ii) and (iii) above will be implemented only after the necessary amendment of the CGST Act and SGST Acts.

SCIENCE AND TECHNOLOGY

INDIA'S SPACE OBSERVATORY

Astrosat, India's first dedicated multi-wavelength space observatory, has accomplished **the extremely strenuous job of X-ray polarisation**, putting up a strong challenge to prevailing **theories of high energy radiation from pulsars**. In a paper published in the reputed journal 'Nature Astronomy', a team of Indian astronomers has documented the results of their 18-month study of the **Crab Pulsar in the Taurus constellation** and **measured the variations of polarisation as this highly-magnetised neutron star spins around 30 times every second**.

What

1. Scientists and astronomers, who participated in the project hail from the country's top scientific institutes -- **the Tata Institute of Fundamental Research (TIFR), Mumbai; the Vikram Sarabhai Space Centre, Thiruvananthapuram; ISRO Satellite Centre (ISAC), Bengaluru; The Inter-**

University Centre for Astronomy and Astrophysics (IUCAA), Pune; and Physical Research Laboratory (PRL), Ahmedabad.

2. **A pulsar is a celestial body, believed to be made up on neutrons**, and rotates 30 times per second. Even though they are comparatively tiny in size, **they have mass more than that of the entire Sun**, and hence are known as compact objects.
3. Having an extremely large mass condensed in a very small volume, these objects possess extremely **strong gravitational and magnetic fields**, both approximately trillion times that on the Earth.
4. They are known to be **sources of intense X-ray radiation**, electromagnetic waves similar to light but having ten to hundred thousand times higher energy, which carries vital clues to understand them as well as the physical processes responsible for the radiation.
5. Astronomers have extensively studied various properties of this radiation to piece together a complete picture of compact objects and their immediate surroundings.
6. **X-ray polarisation measurement is so difficult that so far the only reliable measurement obtained worldwide is for the pulsar in the Crab Nebula -- the ghostly remains of a massive stellar explosion known as supernova, observed in 1054 AD.**
7. The scientists using data from the **CZT (Cadmium Zinc Telluride) imager instrument of the Astrosat satellite**, launched in September, 2015, have performed the most sensitive measurement of X-ray polarisation of the Crab Pulsar, the rotating neutron star which is the main energy source of the nebula.
8. It has been observed that the polarisation is varying the most in the off-pulse duration when no contribution from the pulsar is expected, which poses a serious challenge to most of the current theories of **how this object produces X-rays**.



SUN-LIKE RED GIANT STAR FOUND

Astronomers have for the first time observed the clearest and sharpest view yet of the surface of an ageing star with the mass same as that of the Sun, providing a glimpse of the **solar body's future**. Images captured by **the ALMA telescope** show that the star is a giant, its diameter twice the **size of Earth's orbit around the Sun**, but also that the star's atmosphere is affected by powerful, unexpected shock waves. A team led by Wouter Vlemmings from Chalmers University of Technology in Sweden created sharpest observations yet of the star with the same starting mass as the Sun. The new images show **for the first time details on the surface of the red giant W Hydrae**, 320 light years distant in **the constellation of Hydra, the Water Snake**.

What

1. **W Hydrae is an example of an AGB (asymptotic giant branch) star**. Such stars are cool, bright, old and lose mass via stellar winds. Stars like the Sun evolve over timescales of many billion years. When they reach old age, they puff up and become bigger, cooler and more prone to lose mass in the form of stellar winds.

2. **Stars manufacture important elements like carbon and nitrogen.** When they reach the red giant stage, these elements are released into space, ready to be used in subsequent generations of new stars.
3. **ALMA's images provide the clearest view yet of the surface of a red giant** with a similar mass to the Sun. Earlier sharp images have shown details on much more massive, red supergiant stars like Betelgeuse and Antares.
4. The presence of an unexpectedly compact and bright spot provides evidence that the star has surprisingly hot gas in a layer above the star's surface: a **chromosphere**.

E. COLI INTO SPACE

To study microgravity's effect on bacterial antibiotic resistance, scientists are set to send *E. coli*, a common bacterial pathogen linked to urinary tract infections and foodborne illnesses, to the **International Space Station (ISS)**. The **E. coli AntiMicrobial Satellite (EcAMSat) mission** is scheduled to launch to the ISS on Orbital ATK's Cygnus cargo spacecraft along with a slew of other science experiments and supplies for the Expedition 53 crew.

What

1. **Antibiotic resistance could pose a danger to astronauts**, especially since **microgravity has been shown to weaken human immune response**, NASA said.
2. The **E. coli AntiMicrobial Satellite mission will investigate spaceflight effects on bacterial antibiotic resistance and its genetic basis**.
3. The experiment will expose two strains of *E. coli*, one with a resistance gene, the other without, to three different doses of antibiotics, then examine the viability of each group.
4. The **fundamental scenario of the experiment protocol will start four days after launch of the EcAMSat satellite** by allowing an initial growth and then starvation period for *E. coli* bacteria contained in 48 microfluidic wells.
5. The investigation aims to determine "the lowest dose of antibiotic needed to inhibit growth of *Escherichia coli* (*E. coli*), a bacterial pathogen that causes infections in humans and animals.

GLOBAL CARBON PROJECT FINDING

World carbon emissions are set to rise 2 percent this year to a new record, scientists said on 13 November 2017, dashing hopes that **global emissions had already peaked**. Carbon emissions had been roughly flat from 2014-16, but will increase this year mainly due to a rise in China after a two-year decline, the scientists said. Their data, presented during **negotiations among almost 200 nations in Germany about details of the 2015 Paris Agreement climate accord**, are a setback to a global goal of curbing emissions to avert more downpours, heat waves, and rising sea levels.

What

1. The plateau of last year was not peak emissions after all," **the Global Carbon Project**, a group of 76 scientists in 15 countries, wrote of the findings.
2. **Carbon dioxide emissions from fossil fuels and industry**, the bulk of man-made greenhouse gases, were on track to gain 2 percent in 2017 from 2016 levels to a record high of about 37 billion tonnes.
3. Global CO2 emissions appear to be going up strongly once again ... This is very disappointing," said lead researcher Corinne Le Quere, director of the Tyndall Centre for Climate Change Research at the University of East Anglia in Britain.
4. Glen Peters, another leader of the study at the CICERO Center for International Climate Research in Oslo, said China's emissions were set to rise 3.5 percent, driven by more coal demand amid stronger economic growth.
5. **China, the top greenhouse gas emitter ahead of the United States**, accounts for **almost 30 percent of world emissions**.

6. US emissions were set to decline by 0.4 percent in 2017, a smaller fall than in recent years, also reflecting more burning of coal.
7. Coal's gains were linked to a rise in the price of natural gas that made coal more attractive in power plants, Peters told Reuters, rather than the effects of US President Donald Trump's pro-coal policies.

CHEMICAL COMPOUND FOR FIRST BIOMOLECULES

Scientists, including those of Indian origin, have discovered a compound that may have played a **crucial role in the origin of life on Earth**. Researchers at **The Scripps Research Institute (TSRI)** in the US hypothesised that a chemical reaction called **phosphorylation** may have been crucial for the assembly of **three key ingredients in early life forms**.

What

1. **These ingredients are short strands of nucleotides to store genetic information**, short chains of amino acids (peptides) to do the main work of cells, and **lipids to form encapsulating structures** such as cell walls.
2. No one has ever found a phosphorylating agent that was plausibly present on early Earth and could have produced these three classes of molecules side-by-side under the same realistic conditions, researchers said.
3. TSRI chemists have now identified just such a compound: **diamidophosphate (DAP)**. We suggest a phosphorylation chemistry that could have given rise, all in the same place, to oligonucleotides, **oligopeptides**, and the **cell-like structures to enclose them**.
4. **That in turn would have allowed other chemistries** that were not possible before, potentially leading to the first simple, **cell-based living entities**.
5. Other researchers have described chemical reactions that might have enabled the phosphorylation of pre-biological molecules on the early Earth. However, these scenarios have involved different phosphorylating agents for different types of molecule, as well as different and often uncommon reaction environments.
6. It has been hard to imagine how these very different processes could have combined in the same place to yield the first primitive life forms," said Krishnamurthy. Researchers, including Megha Karki, a postdoctoral research associate at TSRI, showed first that DAP could phosphorylate each of the four nucleoside building blocks of RNA in water or a paste-like state under a wide range of temperatures and other conditions.

FIRST AI-RUN GLOBAL ETF DEBUTS

The **first global equity exchange-traded fund (ETF) run by robots** made its trading debut even as its managers expressed anxiety about investing in an ETF lacking the human touch. I'm going to be buying some but I'm buying it as a nervous investor myself, **Steve Hawkins, co-chief executive officer of Horizons ETFs Management Canada**, said before the **Horizons Active AI Global Equity ETF** began trading on the **Toronto Stock Exchange** on 1 November 2017.

What

1. The **artificial intelligence behind the ETF, developed by Korea-based Qraft Technologies**, was rigorously back-tested over 10 years of market moves to make sure it learned how to interpret data and make smart investments.
2. However, unlike human portfolio managers, **it will never be able to explain why it made a particular decision**.
3. **The Horizon AI fund, sub-advised by Mirae Asset Global Investments**, has a management fee of 0.55 per cent and will be rebalanced monthly.
4. It will invest in global equities using a basket of primarily North American-listed ETFs and will make its decisions using more than 50 metrics, including six-month relative performance and short interest. It trades on the Toronto bourse under the ticker symbol MIND.

5. **The ETF opened little changed at C\$25.15 in Toronto. It's not the first robot-run ETF.** The AI Powered Equity ETF of US stocks, driven by International Business Machines Corporation's Watson computer, beat it by two weeks. Horizons says it's the first to invest in global equities. Toronto-based Horizons, controlled by Seoul-based Mirae Asset, operates 79 ETFs and has C\$8.9 billion (\$6.9 billion) in assets under management.

INDIA JOINS TO TRACE GALAXIES

India and South Africa have decided to expand their **foot-print in the realm of stars underpinned by strong historical ties** dating back to over 100 years. **Bolstering 20 years of strategic partnership between both sides**, India is participating in the **multi-nation Square Kilometre Array (SKA)** – set to become the **world's most powerful radio telescope**.

What

1. **SKA will be the premier radio astronomy facility once it's built**, with stations located in Africa and Australia. Unlike optical telescopes, which can be hampered by cloud or poor weather conditions on Earth, radio telescopes, working with signals at a longer wavelength, can be used even in cloudy skies.
2. Research areas that **India and South Africa have been collaborating** on include the study of transient events, developing new technology for optical and radio telescopes, and future research with the SKA, Steven M. Crawford, SALT Science Data Manager, South African Astronomical Observatory (SAAO) told .
3. The **Southern African Large Telescope (SALT) is the largest optical telescope in Southern Hemisphere** and **SAAO operates it on behalf of the SALT foundation**, which includes South Africa, Inter University Centre for Astronomy and Astrophysics in Pune, India, and other international partners.
4. **Radio astronomy via radio telescopes** (a la Hollywood flick "Contact") provides alternative views to optical telescopes. They can detect invisible gas and can reveal areas of space that may be obscured by cosmic dust. MeerKAT, a 64-dish precursor radio telescope to SKA, is currently being built in South Africa.
5. **MeerKAT's arsenal of 64 receptors will eventually be integrated into the SKA.** When fully up and running in the 2020s, SKA will have a contingent of at least 3,000 dishes spread across a square kilometre spanning two continents. There are a number of key science programmes that will be done on it and some of these involve South Africa and India partnerships.
6. **Hydrogen is the most abundant element in the universe and its building block as well.** Stars essentially form hydrogen.
7. **Galaxies are made up of gas (hydrogen) and stars**, and in order to understand how galaxies evolved, we need to understand how gas is converted to stars and vice versa. To understand star formation, the key component of gas in galaxies is the cold gas component.

TOP SULPHUR DIOXIDE EMITTER

India's emissions of the air pollutant sulphur dioxide increased by **50 per cent since 2007**, while China's fell by 75 per cent, claims a study which found that India is yet to implement emission controls like its neighbour. The study led by researchers at University of Maryland in the US suggests that India is becoming, if it is not already, the **world's top sulphur dioxide emitter**.

What

1. **Sulphur dioxide is an air pollutant** that causes acid rain, haze and many health-related problems.
2. It is produced predominantly when coal is burned to generate electricity. **The rapid decrease of sulphur dioxide emissions in China** far exceeds expectations and projections," said Can Li, an associate research scientist at University of Maryland.

3. **This suggests that China is implementing sulphur dioxide controls** beyond what climate modellers have taken into account.
4. China and India are the world's top consumers of coal, which typically contains up to three per cent sulphur.
5. Most of the two countries' **sulphur dioxide emissions come from coal-fired power plants** and coal-burning factories. In particular, Beijing suffers from severe haze problems because of the many coal-burning factories and power plants located nearby and upwind.
6. **Starting in the early 2000s**, China began implementing policies such as fining polluters, setting emission reduction goals and lowering emissions limits. According to the results of the current study, these efforts are paying off.
7. **Sulphur dioxide levels in China declined dramatically** even though coal usage increased by approximately 50 per cent and electricity generation grew by over 100 per cent, who is also a research associate at NASA's Goddard Space Flight Center.
8. **India's sulphur dioxide emissions increased by 50 per cent over the past decade.** The country opened its largest coal-fired power plant in 2012 and has yet to implement emission controls like China.
9. **India's increased sulphur dioxide emissions** are not causing as many health or haze problems as they do in China because the largest emission sources are not in the most densely populated area of India.
10. First, they collected estimated emission amounts from inventories of the number of factories, power plants, automobiles and other contributors to sulphur dioxide emissions.
11. The researchers' second data source was the Ozone Monitoring Instrument (OMI) on NASA's Aura satellite, which detects a variety of atmospheric pollutants including sulphur dioxide.

MISCELLANEOUS

JNANPITH AWARD 2017 ANNOUNCED

Renowned Hindi littérateur **Krishna Sobti has been chosen for this year's Jnanpith Award**, the **Jnanpith Selection Board announced** on 3 November 2017. Born in 1925 in Gujrat in Pakistan's Punjab Province, Sobti (92) is known for experimenting with **new writing styles and creating "bold" and "daring" characters in her stories** that were ready to accept all challenges. Her language was highly **influenced by the intermingling of Hindi, Urdu and Punjabi cultures.**

What

1. **Sobti is a path-breaking novelist.** She has immensely enriched Hindi literature," the statement by the board, chaired by noted scholar, writer and critic Namwar Singh, said.
2. Others on the decision-making body included Girishwar Misra, Shamim Hanfi, Harish Trivedi, Suranjan Das, Ramakant Rath, Chandrakant Patil, Alok Rai, C Radhakrishnan, Madhishudhan Anand and Leeladhar Mandloi.
3. **The writer's choice of subjects ranged from the Partition, and relationships between man and woman, to the changing dynamics of the Indian society** and the gradual deterioration of human values.
4. Some of her celebrated works include Daar Se Bichhudi, Mitro Marjani, Zindaginama, Dil-o-Danish, Badalom ke Ghare, Ai Ladki and Gujarat Pakistan Se Gujarat Hindustan. Several of her works have been translated into other Indian languages and also in Swedish, Russian and English.
5. She has been the recipient of many coveted awards in the past, including Hindi Akademi Awards, Shiroman Awards, Maithli Sharan Gupt Samman, Sahitya Akademi Fellowship and Padma Bhushan.

INDIAN WOMEN WIN ASIA CUP

India edged past China 5-4 via shootout to win the **women's Asia Cup hockey** title in Japan on 5 November 2017. With this, **India also qualified for next year's World Cup** as Continental champion. It was skipper Rani Rampal who scored the winning goal while Savita Punia made a great save in sudden death.

What

1. **It was advantage China as a stick check in the circle** saw India concede a penalty corner in only the second minute of the game. However, Savita padded it away and an alert Deep Grace cleared the ball.
2. A second penalty corner was again padded away by Savita. With the first quarter ending in a stalemate, India came back looking determined to find a breakthrough.
3. **The forwards made several forays into the striking circle.** India found the breakthrough in the 25th minute through Navjot Kaur.
4. Though China launched a counter attack, the Indian defenders were up to the task. The final quarter was tense as China won a penalty corner through a successful video referral in the 47th minute.

WORLD'S HIGHEST MOTORABLE ROAD

The **Border Roads Organization (BRO)** has constructed the **world's highest motorable road in the Ladakh region** of Jammu and Kashmir, passing through **Umling La Top at a height of over 19,300 feet**. The feat was achieved under "**Project Himank**" of the BRO. Being close to Hanle, the 86-km-long strategic road through **Umling La Top connects Chisumle and Demchok villages**, located 230km from Leh. These villages are very close to the India-China border in eastern sector.

What

1. **Project Himank chief engineer Brigadier D.M. Purvimath** said constructing **the road at the altitude of over 19,300 feet** was filled with life threatening challenges. He said the climate at the location is always adverse for construction activities.
2. During peak summers, **temperature hovers around minus 10-20 degrees Celsius**, and in winters, it dips to minus 40 degrees.
3. **Oxygen level at the altitude is 50% less than at normal places.** Efficiency of machines and manpower declines by 50% due to harsh climate and less oxygen level. Also, machine operators have to come down every 10 minutes for oxygen.
4. Logistics was another major challenge at such an altitude. Taking equipment at such a height, repairing and maintaining it is a major task since equipment face a lot of breakdowns.
5. Acclimatization of men is done at three stages—Leh, Shakti and Numa—before being inducted into the sector. Physical and mental fitness of men is emphasized upon for working in the area as the working season is limited in the region.
6. The **Project Himank has already constructed roads like Khardung La at an altitude of 17,900 ft** and Chang La Pass at 17,695 ft in Leh by connecting Nubra valley and Durbuk valley in the cold desert.

TEXT-BASED NEGOTIATIONS FOR UNSC REFORM

India, Brazil, Germany and Japan have called for an immediate start of the **text-based negotiations to reform the UN Security Council**, asserting that it was important to make the **apex organ of the world body more reflective of the 21st century realities**. Speaking on behalf of the G4 nations, Permanent Representative of Japan to the United Nations Koro Bessho told the UN General Assembly that **in order to achieve the objective**

of reforming the 15-member Security Council, enlargement in both the permanent and non-permanent categories was required.

What

1. Early reform of the Security Council is needed in order to “make it more legitimate, effective and representative, reflecting the realities of the 21st century.
2. **There is broad support from member states** for this means of expanding Security Council membership that enlargement should consider the contribution of members to the maintenance of international peace and security.
3. It also needs to enhance **regional representation in the Security Council** by ensuring that the concerns and aspirations of unrepresented or underrepresented regions are adequately taken into consideration, said the Japanese ambassador.
4. **The reform of the Security Council is long overdue.** If we truly seek to preserve the credibility of the process, of this august assembly, and indeed of the entire United Nations, there is no more time to lose.
5. **Text-based negotiations should be initiated immediately.** This is precisely the process we use to translate words into action here in the United Nations.
6. Representing the views of the **Uniting for Consensus (UfC) group**, which among others includes Pakistan, Italian Ambassador to the UN Sebastiano Cardi reiterated the offer of “a compromise solution consisting of longer-term non-permanent members with possibility of an immediate re-election, coupled with a more equitable distribution of seats among regional groups”.
7. The longer-term seats would fulfil the legitimate desire of “some member states to make a greater contribution” to the work of the Council, Cardi said, adding that this reform model would enhance regional representation.

PARADISE PAPERS

More than 700 Indian names, including those of politicians, corporates and celebrities, on 6 November 2017 figured in the leaked ‘Paradise Papers’ detailing business dealings of “the world’s most powerful people and companies” **in offshore tax havens**. Regulatory and enforcement agencies swung into action by promising a multi-regulatory probe soon after the names started tumbling out as part of the latest global expose by the **International Consortium of Investigative Journalists (ICIJ)**, even as several of those named denied any wrongdoing. The Indian names include Bollywood star Amitabh Bachchan, defaulter businessman Vijay Mallya, corporate lobbyist Niira Radia, film star Sanjay Dutt’s wife Dilnashin, union minister Jayant Sinha and Rajya Sabha MP R.K. Sinha, the ICIJ’s media partner in the country. **The ICIJ, which worked with 95 media partners globally for the investigation**, said it explored 13.4 million leaked files from offshore law firms, majorly **Bermuda-based Appleby**, and company registries in several secretive tax jurisdictions.

What

1. Among the 180 countries represented in the data, **India ranked 19th in terms of number of names (714)**, while Sun Group, founded by Nand Lal Khemka, figured as Appleby’s second largest client with as many as **118 offshore entities**.
2. **The ICIJ said the ‘Paradise Papers’ reveal the offshore activities of some of the world’s most powerful people** and companies and the files were obtained by the German newspaper Sueddeutsche Zeitung.
3. The Indian names also included those associated with the Sun TV-Aircel-Maxis case, Essar-Loop 2G case, SNC-Lavalin in which Kerala chief minister Pinarayi Vijayan was named and then cleared and a case against Y.S. Jagan Mohan Reddy; as also entities linked to Rajasthan ambulance scam that names an entity called Ziquista Healthcare (with Congress leader Sachin Pilot and former minister P. Chidambaram’s son Karti as early honorary/independent directors).
4. The Indian names on the list included a number of listed entities, some of which saw their shares falling, while regulatory officials said they would look into any wrongdoing on the part of such companies or their promoters with regard to alleged fund diversion and corporate governance lapses.

5. Rights group Transparency International called for stricter measures to regulate the financial sector and their participants, including real estate brokers, lawyers and bankers. US-based think-tank **Global Financial Integrity (GFI) said multi-national companies (MNCs) should be required to publicly report** their number of employees, facilities and their revenue on a country-by-country basis to help check tax abuses.
6. The ICIJ said the **'Paradise Papers' reveal offshore interests and activities of more than 120 politicians and world leaders**, including Queen Elizabeth II whose private estate indirectly invested in a rent-to-own loan company accused of predatory tactics.
7. The leaked files also detailed how owners of jets and yachts, including royalty and sports stars, used Isle of Man tax avoidance structures, and revealed tax haven shopping sprees by MNCs in Africa and Asia that use shell companies in Mauritius and Singapore to reduce taxes.

NAMES TO BE SENT TO MARS

Over 1.6 million people have signed up with NASA to get their names etched on a silicon microchip that will be carried on **upcoming Insight mission**, and **sent to Mars. NASA's Insight mission is slated to launch in May 2018**. The US space agency initiated the process of inviting people to send their names to Mars last month.

What

1. **This is not the first time that NASA has carried out such a mission**. In 2015, nearly 827,000 names were collected by **NASA's Jet Propulsion Laboratory in Pasadena**, California and attached to robotic InSight lander.
2. The grand total once a second microchip is added in early 2018 will be 2,429,807 names.
3. Space enthusiasts who signed up this last round shared their downloadable "boarding passes" on social media, complete with the total number of flight miles they've collected by participating in engagement initiatives for other Mars missions.
4. NASA says its journey to Mars will span "**multiple missions and multiple decades**", and "frequent flier" points will help the agency identify individual's participation in this journey.
5. NASA's InSight mission was essentially launched with an **aim to investigate the deep interior of Mars**.
6. It is said to "look beyond the Martian surface" and study interior of the planet by listening for marsquakes.
7. This will help scientists get a better idea of what the composition and structure of Mars' interior is.

SRI RANGANATHASWAMY TEMPLE WINS UNESCO AWARD

The **Sri Ranganathaswamy temple** at Srirangam in Tamil Nadu has won **UNESCO Asia-Pacific award for cultural heritage conservation programme** in the Awards of Merit category. **It is first temple from Tamil Nadu** to grab the prestigious honour from the UN body. The temple won the award in recognition of **its efforts for protecting and conserving cultural heritage**.

What

1. It is one of the most illustrious **Vaishnava temples in South India**.
2. It has been mentioned **Tamil literature as early as Sangam era**.
3. The temple is treasure trove of India's ancient history. It is constructed in the Tamil or Dravidian style of temple architecture.

4. It is known by several names such as **Thiruvaranga Tirupati, Bhoologa Vaikundam**, Periyakoil, Bhogamandabam.
5. This temple lies on an island formed by **twin rivers Cauvery and Coleroon**.
6. Its complex stretches over 156 acres with perimeter of 4,116 m. It is the largest temple in India and one of largest religious complexes in the world.
7. The main entrance of temple known as **Rajagopuram (royal temple tower)** is 73m high and moves up in eleven progressively smaller tiers.
8. The temple annually hosts 21-day festival during the Tamil month of Margazhi (between December and January) which attracts over 1 million visitors.

About the Award

1. The **awards were launched in 2000** by UNESCO for cultural heritage conservation programme.
2. They are given under **four categories—Award of Excellence, Awards of Distinction, Awards of Merit and Award for New Design in Heritage Context**.
3. These awards aim at acknowledging efforts taken to restore and conserve historical structures without affecting their heritage value in **region comprising 48 countries**.
4. They are being given to encourage the efforts of all stakeholders and the public in conserving and promoting monuments and religious institutes with rich heritage in the Asia-Pacific region.

CRI 2017

India is the sixth most vulnerable country in the world in terms of facing **extreme weather events** with **Haiti, Zimbabwe, Fiji, Sri Lanka and Vietnam taking top five positions** in the fresh list of nations facing climate risk. **The ranking was released here by the Germanwatch**, an independent Berlin-based development and environmental organisation, on 9 November 2017 in its **latest global climate risk index (CRI)**. The Index put the **United States (US) at 10th position** with Chinese Taipei, Macedonia and Bolivia being the other three vulnerable countries in the list of top ten. **The Germanwatch comes out with the CRI by analysing number of deaths per 1, 00,000 inhabitants** extent of financial losses and loss per unit of **Gross Domestic Product (GDP) of countries**.

What

1. India was at number four in terms of **CRI ranking last year**. Economic and population data from **International Monetary Fund (IMF) was taken into account** while arriving at the ranking. The CRI indicates a level of exposure and vulnerability to extreme events.
2. In the present analysis, only weather related events - **storms, floods and temperature extremes (heat and cold waves) - are incorporated**.
3. Geological incidents like **earthquakes, volcanic eruptions or tsunamis**, for which data is also available, are not relevant in this context as they do not depend on the weather and therefore are not possibly related to climate change, the report said.
4. The report noted that **India had in 2016 lost the maximum number of human lives (2119)** and over \$21 billion worth of properties.
5. The US had suffered the maximum financial loss (over \$47 billion) last year. Analysing the relevant data of past 20 years (1997-2016), the CRI report found that the world had lost lives of 5,24,000 people and suffered financial losses to the tune of \$3.16 trillion as a direct result of more than 11,000 extreme weather events during the period.
6. As far as long-term (1997-2016) CRI of countries are concerned, **India is not in the list of the top 10 vulnerable nations** which include Honduras, Haiti, Myanmar, Nicaragua, Philippines, Bangladesh, Pakistan, Vietnam, Thailand and Dominican Republic (in that order) in the list. India figured at 12th position in that list.
7. **It is based on the current and past climate variability and also on climate change**, the report said.

- In the context of climate risk, the report also specifically mentioned the **UNEP Adaptation Gap Report of 2016**, which warned the nations that the increasing impacts and resultant increase in global adaptation costs by 2030 or 2050 are likely to be much higher than what is expected now.

SC DECLINES PLEA TO DECLARE HINDUS AS MINORITY

The Supreme Court refused to entertain a petition seeking its direction to Centre to grant minority status to Hindus in eight states. A bench headed by Justice Ranjan Gogoi said that issue needed to be decided by **National Commission for Minorities** and asked the petition to approach the commission. The public interest litigation (PIL) sought minority status to Hindus in eight states- **Jammu and Kashmir, Punjab, Lakshadweep, Mizoram, Nagaland, Meghalaya, Arunachal Pradesh and Manipur.**

What

- The PIL, filed by advocate **Ashwini Kumar Upadhyay**, has said that Hindus are minority in these states but their legitimate benefits are being siphoned off arbitrarily to the majority, because of non-identification and non-notification of minorities at the State level.
- The Union Government offered 20,000 scholarships in field of technical education for minority students. In J&K, Muslims are 68.30% and government allotted 717 out of 753 scholarships to Muslim students, but none to Hindu students.
- As per a **1993 notification by the Centre, Muslims, Christians, Sikhs, Buddhists and Parsis** were granted minority status in India and Jains were added in the list in 2014.
- Citing the **2011 Census, the petition says that Hindus are minority in eight States** i.e. **Lakshadweep (2.5%), Mizoram (2.75%), Nagaland (8.75%), Meghalaya (11.53%), J&K (28.44%), Arunachal Pradesh (29%), Manipur (31.39%) and Punjab (38.40%).**
- It further says that **Muslims are majority in Lakshadweep (96.20%)** and Jammu & Kashmir (68.30%), and there is significant Muslim population in Assam (34.20%), West Bengal (27.5%), Kerala (26.60%), Uttar Pradesh (19.30%) and Bihar (18%).

FIRST STATE TO TREAT HEPATITIS-C PATIENTS WITH ORAL MEDICINE

Haryana became India's first state to treat Hepatitis-C patients of all categories through oral medicine. This is for first time state government has included oral medicine in government hospitals. **This oral medicine** will be provided free of cost for permanent residents of all categories at the district level.

What

- Hepatitis is a medical condition** in which there occurs inflammation of liver cells and its complications vary with type of infection.
- There are **5 types of hepatitis viz. A, B, C, D and E.** Each type is caused by a different hepatitis virus.
- It is mostly caused by a group of viruses called hepatitis viruses and also be caused by intoxicants like drugs, alcohol, chemicals and other infections and autoimmune diseases.
- The disease mostly spreads through infection and blades used by barbers were also responsible for this.

EPIDERMOLYSIS BULLOSA

In a first, scientists have successfully treated a child suffering from **extensive skin damage** due to a **genetic disease using transplants** derived from genetically modified cells. The boy suffers from **epidermolysis bullosa**, a genetic skin disease that had destroyed about **80 per cent of the outermost layer of his skin.** After all established therapies had

failed the medical team from at the **Ruhr-Universität Bochum in Germany** and **University of Modena in Italy** decided to try an experimental approach.

They transplanted skin derived from genetically modified stem cells onto the wound surfaces. The boy is now - two years after the treatment - able to participate in his family's life and social life.

What

1. **Epidermolysis bullosa** is the **scientific name of a congenital skin disease** that is currently considered to be incurable.
2. Its underlying mechanism is a **defect in protein-forming genes** that are essential for skin regeneration. Even minor stress can result in blisters, wounds, and skin loss with scar formation.
3. Depending on disease severity, internal organs may likewise be affected, leading to critical dysfunctions.
4. The disease **significantly reduces the patients' quality of life**; often it is also life-threatening.
5. By the time, seven-year-old Hassan was admitted to the paediatric intensive care unit at Katholisches Klinikum Bochum in June 2015, 60 per cent of his epidermis was lost.
6. **He suffered from severe sepsis with high fever** and his body weight had dropped to a mere 17 kilogrammes - a life- threatening condition, Consultant at the University Children's Hospital at Katholisches Klinikum Bochum.
7. **The integration of the intact gene through retroviral gene** transfer into the genome of the epidermal stem cells had been successful and was proven to be stable.
8. In February last year, the patient was discharged. Almost two years after the experimental therapy was initiated, high-quality, stress-resistant skin with intact hydrophilic film, as well as early formation of hair.

SAGAR KAVACH

The **Governments of Odisha and neighbouring West Bengal** conducted joint security exercise named '**Sagar Kavach**' to further tighten the existing coastal security mechanism along the 630 km long coastline. It was security exercise to check efficacy of security parameters and preparedness of various security forces like Indian Navy, Marine police force, Indian Coast Guard (ICG), Forest Department, Fisheries and district administration.

What

1. In the exercise, they had organised simulated terror attack named '**red force**' at random place along **Odisha or West Bengal coast** and check effectiveness of marine policing.
2. The participants in drill were personnel from Indian Navy, ICG at Paradip and Haldia, 18 marine police stations in Odisha and 12 police stations of West Bengal.
3. The drill re-validated existing Standard Operating Procedure (SOP) mechanisms.

MARY KOM WINS GOLD MEDAL

Five time world champion Mary Kom won gold medal in **Asian Women's Boxing Championships** in Light Flyweight (48 kg) category. In the final match held at **Ho Chi Minh City in Vietnam**, she defeated North Korea's Kim Hyang Mi in the final bout 5-0 by unanimous judges decision. **It was her fifth gold medal in 48 kg category** in Asian Women's Boxing Championships (earlier won in 2003, 2005, 2010 and 2012) in **only six appearances** (in 2008 final she won silver), making her unbeaten in summit clash of continental championship. **This was also Mary Kom's first international gold medal** since 2014 Asian Games and her first medal in over year.

The largest ever NAS conducted

The National Achievement Survey (NAS) is the largest ever national assessment survey in the country and is amongst the largest in the world, was conducted throughout the country. Union HRD Minister Shri Prakash Javadekar said that **the NAS is a transparent and credible exercise done under third party verification**. It was conducted for the **Classes 3, 5 and 8** in government and government aided schools. The survey tools used multiple test booklets with 45 questions in Classes III and V related to language, mathematics and 60 questions in Class VIII in **Mathematics, Language, Sciences and Social Sciences**. The competency based test questions developed reflected the Learning Outcomes developed by the NCERT which were recently incorporated in the Right to Education Act (RTE) by the Government of India. Along with the test items, questionnaires pertaining to students, teachers and schools were also used.

What

1. **The learning levels of more than 25 lakhs students from 1,10,000 across 700 districts in all 36 States/UTs were assessed.**
2. More than 1.75 lakhs trained Field Investigators from outside the government education system were engaged to conduct the learning assessment in the country.
3. To ensure the fairness of the survey, a monitoring team was constituted which consisted of observers from inter-ministerial departments drawn from the State Governments, **National and State Observers from Education Departments** and **multi-lateral organizations**.
4. This monitoring team observed the implementation of the survey in all the districts, on the Day of Assessment.
5. The district wise learning report cards will be prepared based on a software especially designed for this. Subsequently, analytical reports will be prepared.
6. The findings of the survey will also help in understanding the efficiency of the education system. NAS results will help guide education policy, planning and implementation at national, state, district and classroom levels for improving learning levels of children and bringing about qualitative improvements.

Time frame for discrepancies

Candidates appearing for examinations conducted by **Union Public Service Commission** will have **seven days** to report mistakes or **discrepancies in questions** prepared for the tests. The **fixing of a time frame of seven days comes against the backdrop of the UPSC getting representations after a long time**. The representation must only be submitted online and no representation by post or by hand will be entertained.

What

1. **For each examination, a time frame of seven days (a week)** from the next day of the examination date to 6 pm of the seventh day is fixed for the candidates to make representations to the commission on the questions asked in the papers of that examination, the UPSC said.
2. Giving an example, the UPSC said if an examination is conducted on March 1, then a candidate can make his/her representation by 6 pm of March 8.
3. For an examination conducted on two or more days, the dates on which the paper of that examination are held, will be the crucial reckoning date for making representation on the questions appeared in those papers.
4. **No representation will be entertained under any circumstances after this window** of seven days is over, the UPSC said.

IBSF World Billiards Championship

Ace Indian cueist **Pankaj Advani won 2017 IBSF World Billiards Championship** held at Doha. In the final match, he defeated **Mike Russell** of England 6-2 to defend the 150-up format title which he had won in Bengaluru in 2016. In the semi-finals, he had defeated fellow Indian Rupesh Shah by 5-2 score, while Mike Russell got the better of

Singapore's Peter Gilchrist 5-1. It was Pankaj Advani's overall 17th world title. He is winner of maximum number of world titles in any sport by an Indian

WORLD PNEUMONIA DAY

The **World Pneumonia Day** is observed globally **every year on November 12** to generate awareness about the '**pneumonia**' disease. The observance of day aims to highlight the **severity of pneumonia** and bring together the people from all over the world to promote the prevention and treatment of the disease. Pneumonia is a form of acute respiratory infection that affects the lungs. It is caused by inflammation of the airspaces in the lungs.

Background

1. The **World Pneumonia Day was first observed in 2009** after more than 100 organisations joined together form Global Coalition against Child Pneumonia.
2. At present, global coalition comprises of over 140 NGOs, academic institutions, government agencies and foundations.

SUPREME COURT REFUSES TO BAN KAMBALA

The Supreme Court has refused to **pass an interim order to stay Ordinance** allowing kambala, the traditional buffalo slush track race in Karnataka. However, the apex court will examine the Constitutional validity of the Ordinance. People for **Ethical Treatment of Animals (PETA)**, a non-governmental organisation, had challenged the Ordinance.

What

1. **Karnataka Assembly** had passed an ordinance Prevention of Cruelty to Animals (**Karnataka Amendment) Bill, 2017** in February 2017 to allow Kambal to circumvent ban imposed by Karnataka High Court.
2. The ordinance had received Central Government (Ministry of Law and Justice) and Presidential assent.
3. The Karnataka HC had stayed these traditional sports in view of Supreme Court's ban on jallikattu, a traditional bull taming sport of Tamil Nadu.

About Kambala

1. **Kambala is traditional slush track buffalo race** that is held annually in coastal districts of Karnataka to entertain rural people of the area.
2. **Slushy/marshy paddy field track is used for Kambala.**
3. The sports season generally starts in November and lasts till March.
4. The contest generally takes place between two pairs of buffaloes, each pair race in two separate wet rice fields tracks, controlled by a whip-lashing farmer.
5. In the traditional form of Kambala, **buffalo racing was non-competitive** and buffalo pairs ran one by one in paddy fields.
6. Besides, there was also ritualistic approach as some agriculturists' race their buffaloes as a means to thank god for protecting their animals from disease.

TOP DESTINATIONS IN INDIA

According to the 5th biennial Hotelivate State Ranking Survey for Tourism, **Delhi is still the "destination leader"**. The Survey looks at States from the hospitality industry's standpoint. Overall too, surprising though it may sound given the **high decibel marketing and work put in by States such as Rajasthan and Kerala, Delhi tops the charts.**

What

1. According to the survey, done in **association with the World Travel World Travel & Tourism Council-India Initiative (WTTC-II)**, the top five states in tourism rankings are **Delhi, Maharashtra, Goa, Tamil Nadu and Gujarat.**
2. The **eleven parameters that the surveyors** have looked at are: **state expenditure on tourism, number of tourist visits, number of branded hotel**

- rooms, GSDP per capital, literacy, aircraft movement, ease of doing business, urbanization, road and rail network, urbanization, marketing campaigns and some intangible aspects.
3. **Tamil Nadu ranked fourth overall is on top when it comes to tourist visits**, to which according to the survey, medical tourism has been a large contributor. However, in terms of Ease of Doing Business the state has dropped six places since the last survey and the state government spends the least on tourism expenditure (just 0.015 per cent of total expenditure). If the expenditure were to be upped, this is a state with great potential in tourism, finds the survey.
 4. At the Awards function held at the Park Hotel in Delhi, state performers in seven categories were recognised. **Assam got the award for best policy and leadership in tourism among the states**, while **Telangana bagged the honours for 'Investment attractiveness'**.
 5. **Rajasthan got the Marketing Innovation award. Among the North Eastern states, which were grouped in a separate category, Sikkim topped.**
 6. **India registered roughly 8 million international tourist arrivals in 2015** which grew by 9.7 per cent to almost 8.8 million international tourist arrivals in 2016 (exclusive of NRI arrivals and transit arrivals).
 7. In 2016, an estimated \$22.9 billion was earned as Foreign Exchange Earnings; an 8.8 per cent increase over the approximate \$21.1 billion earned in 2015.