

GS PAPER 2

TOPIC: INTERNATIONAL RELATIONS

Why is the World Bank keen on resolving Indus divide?

<http://www.thehindu.com/news/national/why-is-the-world-bank-keen-on-resolving-indus-divide/article17530190.ece>

Why in news?

- Bank was enthused about settling the contradictions between the two countries over the translation of the Indus Waters Treaty (IWT) taking after the development by India of two hydroelectric power plants.
- In spite of the fact that the two countries have had no new clash over the sharing of stream waters for over five decades, contrasts sprung up after Pakistan contradicted the development of the **Kishenganga (330 MW) and Ratle (850 MW) control plants by India on the Jhelum and Chenab in Jammu and Kashmir, over which Pakistan has unlimited rights under the bargain.**

Background

- Indeed, even before Partition, the Indus had made issues among the conditions of British India.
- The issues got to be distinctly global after the production of two countries as the political limit was drawn ideal over the Indus bowl.
- The World Bank (then IBRD), under the administration of Eugene Black, caused in 1952 to settle the debate between the two countries on the sharing of the Indus stream bowl waters.
- He had said the acceleration of the question would harm the monetary advancement of the Indian subcontinent.
- Following eight years of hard transactions, Prime Minister Jawaharlal Nehru and President Ayub Khan marked **the IWT** on September 19, 1960. The **Bank is additionally a signatory** to the arrangement.
- The IWT is a mind boggling instrument, including 12 articles and eight annexures. It puts forward arrangements of participation between the two nations in their utilization of the streams, known as the **Permanent Indus Commission (PIC).**

Decision

- As indicated by the IWT, **India has control over three eastern waterways** of the Indus bowl — the **Beas, the Ravi and the Sutlej** — and **Pakistan has control over the three western streams — the Indus, the Chenab and the Jhelum.**
- Each of the six waterways spill out of India to Pakistan. Among different uses, **India is allowed to develop construct power facilities on these streams subject to directions set down in the bargain.**

Has there been any violation?

- India had approached the bank for arrangement of an unbiased master taking after Pakistan's protests to two activities, while Pakistan requested the development of a court of arbitration, charging that India had disregarded the settlement.
- In December 2016, the Bank reported a "stop" and requested that both sides settle the issue agreeably before the finish of January 2017.

What stand did the Bank take?

- India respected the Bank's impartial stand; while Pakistan looked for intercession of the Bank in the wake of being not able to locate an agreeable answer for the debate through the commission.
- Given that India has remained the Bank's single biggest borrower since its commencement with total borrowings from IBRD and IDA touching \$103 billion, the bank did not maybe need to surprise it.
- With lightness in outside trade holds, the Bank needs India more than the other path round and this has made some uneasiness in the Bank hovers about the future bearing of their relationship.
- Why is the Bank playing a role again?
- This is on account of India and Pakistan is imperative accomplices and customers of the Bank.
- In South Asia, Pakistan (\$2,280 million) got the most astounding loaning from the Bank after India (\$3,845 million) amid the financial 2016. Also, there are not very numerous borrowers with a solid record like India.
- The Bank kept up its guide could be successfully utilized if both countries kept the peace and guaranteed better administration of the waters, on which lakhs of agriculturists depend.
- As both countries have neglected to determine the debate agreeably, the Bank CEO has started a discourse.
- Changing its position, India has consented to go to a meeting of the commission in Lahore one week from now. Like in the 1950s, Bank authorities are again assuming the part of arbiter.

GS PAPER 3

TOPIC: ECONOMY

1. Human Development Index

<http://pib.nic.in/newsite/PrintRelease.aspx>

Context:

- As indicated by the report 'Human Development in Andhra Pradesh' arranged for Government of Andhra Pradesh by Center for Economic and Social Studies in 2016, the rank of Andhra Pradesh in Human Development Index(HDI) among 21 noteworthy States of India was 12 in 2004-05 and 9 in 2011-12.

- **The initiatives taken by the Government to further increase the HDI in the country include:**
 - i. Health sector: Promoting institutional deliveries, strengthening of health infrastructure, training of service providers in management of emergency obstetric care and skilled birth attendance
 - ii. Providing ante-natal and post-natal care
 - iii. Organising village health and nutrition days
 - iv. Engagement of an accredited social health activist (ASHA) in the community
 - v. Establishment of nutritional rehabilitation centres, strengthening routine immunization programme, focussing on reduction in morbidity and mortality due to acute respiratory infections (ARI) and diarrhoeal disease.
 - vi. Education: Enactment and operationalisation of Right of Children to Free and Compulsory Education (RTE) Act, 2009, Sarva Shiksha Abhiyan, Mid-Day-Meal Scheme, National Programme for Education of Girls at Elementary level, setting up of Kasturba Gandhi BalikaVidyalaya, MahilaSamakhya programme, scheme for providing quality education in Madararasas
 - vii. Food: The National Food Security Act, 2013 aims to provide for food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity
 - viii. Introduction of name based web enabled tracking of pregnant women & children (Mother and Child Tracking System) to ensure antenatal, intra-natal and postnatal care to pregnant women and care to new-borns, infants and children
 - ix. Employment: Improving the purchasing power of the people through various income generating schemes including Mahatma Gandhi National Rural Employment Guarantee Scheme
 - x. Training of ASHAs in Home based new born care, training of health care providers in essential new-born care and resuscitation, providing new-born care at all levels, promoting exclusive breastfeeding and complementary feeding

TOPIC: SCIENCE AND TECHNOLOGY

2. Flexing nanotech to prevent steel corrosion

<http://www.thehindu.com/sci-tech/science/flexing-nanotech-to-prevent-steel-corrosion/article17527942.ece>

What's in news?

- **Swinging to nanotechnology**, a gathering of marine analysts from Kerala is endeavoring to battle erosion of steel utilized for making angling vessels. Consumption of steel has been a noteworthy reason for sympathy toward the angling segment of Kerala where steel vessels have practically supplanted wooden ones.

- There is upgraded risk of consumption on account of welding joints and the structure of a vessel. The non-accessibility of good quality steel (BIS 2062 Grade B steel) as indicated for watercraft building has intensified the issue.
- Scientists at the Central Institute of Fisheries Technology (CIFT), Kochi, have successfully tried applying nanomaterials like nano iron oxide, zinc oxide, cerium oxide and titanium oxides on steel surfaces under lab conditions.
- These nanomaterials have high surface area and increased adhesiveness to the substrate.
- The boat-building steel was coated with nano-trimetal oxide mixtures, and its evaluation in laboratory showed about 40% corrosion inhibition under marine environments.
- Customary techniques for covering of steel materials with artistic, polymeric and electro-statement are successful just to a restricted degree. The scientists called attention to that the real drawbacks appeared by these coatings are poor grip, covering deserts, poor scratch resistance, optical straightforwardness, low covering adaptability and defenselessness to scraped spot.
- Even the recently introduced nanomaterial-incorporated polymer coatings have their own set of challenges — they tend to develop pinholes and pores, which could lead to the penetration of corrosive agents into the matrix followed by corrosion.

TOPIC: ENVIRONMENT AND ECOLOGY

1. Air quality in Delhi poor on 90 per cent of total winter days: study

<http://www.deccanchronicle.com/lifestyle/pets-and-environment/170317/air-quality-in-delhi-poor-on-90-per-cent-of-total-winter-days-study.html>

Why in news?

- The month to month normal PM 2.5 focus was recorded to be the most noteworthy in November at all checking stations, with the exception of ITO and Dilshad Garden.
- The capital did not see a solitary "decent" air quality day all through winter, a report by the Center for Environment and Energy Development (CEED) has uncovered.
- The air quality was "poor" or 'exceptionally poor' for almost 90 per cent of the days in the previous four months with not a solitary day recording a "decent" air quality day.
- Six per cent of the aggregate winter days even fell into the "severe" class with PM 2.5 levels more than 300 µg/m³.
- On November 5, the checking station of Delhi Technological University (DTU) close Bawana industrial area got the greatest normal convergence of particulate matter at 981 µg/m³.
- A conceivable reason credited to the higher PM focus can be the vicinity to the railroad intersection and the nearness of landfill dumping site.

2. National Physical Laboratory(NPL)- CSIR dedicates the first “Pristine air-quality monitoring station at Palampur” to the Nation

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=159487>

- National Physical Laboratory (NPL) has established an atmospheric monitoring station in the campus of Institute of Himalayan Bioresource Technology (IHBT) at Palampur (H.P.) at an altitude of 1391 m for generating the base data for atmospheric trace species & properties to serve as reference for comparison of polluted atmosphere in India.
- **Key facts:**
 - ✓ The station houses calibrated state-of-the-art-equipment for the continuous measurements of ambient and greenhouse gases (CO, NO, NO₂, NH₃, SO₂, O₃, PM₁, PM_{2.5}, PM₁₀, hydrocarbons, black-carbon, CO₂ & CH₄), and weather parameters.
 - ✓ Because of Palampur’s pristine air, and the capability of the new monitoring station for detection of small amounts of pollutants, the impact of faraway pollution sources can be measured precisely.
 - ✓ This new station has the experimental facilities to investigate the aerosol/cloud interactions, and such investigations are helpful in generating a better understanding of the Earth’s climate system.
 - ✓ The data generated by pristine station at Palampur will act as background data for the measured pollution at various cities in the country. The generated background data will be shared with different pollution control boards and agencies in the country so that the more precise pollution mapping traceable to standard values can be done, which in turn, would assist policy decisions for the abatement of air pollutants.
 - ✓ In India, air quality parameters are mostly measured in industrial and residential areas, **however, data for air quality of pristine atmosphere is not available in India.** NPL’s station will contribute to fill this important gap.
 - ✓ The NPL’s station will also serve as a base station for inter-comparison of air quality monitoring equipment being used in India to improve quality of monitored data in India.

MULTIPLE CHOICE QUESTIONS

Practice Question:

Q1) With reference to India’s ‘National Physical Laboratory (NPL)’, consider the following statements:

1. It is the repository of physical standards such as the kilogram, second and the centimeter
2. It has been set up by the Ministry of Environmental and Forest.

Which of the statements given above is/are correct?

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: a)

Topic-Current Affairs

Level-Moderate

Explanations: The National Physical Laboratory, an organisation of the Council of Scientific and Industrial Research, is best known for being the repository of physical standards such as the kilogram, second and the centimetre.

Q2) 'Larson C' ice shelf has been in the news in recent times for which one of the following reasons?

- a) A huge iceberg, expected to be one of the largest ever recorded, is poised to break off from this ice shelf that is located in Antarctica.
- b) It is one of the largest proven oil deposits beneath it in the Arctic.
- c) It is being subject to a man-made breakup (collapse) by Russia so as to open up the Northern Sea Route all year, making it a commercially viable route.
- d) None of the above

Correct Answer: A

Explanation:

Topic-Current Affairs

Level-Moderate

- Larsen C is the most northern major ice shelf in Antarctica. An iceberg expected to be one of the 10 largest ever recorded is ready to break away from this ice shelf in Antarctica, scientists say.
- Researchers have been tracking the rift in Larsen C for many years, watching it with some trepidation after the collapse of Larsen A ice shelf in 1995 and the sudden break-up of the Larsen B shelf in 2002.
- Last year, researchers reported that the Larsen C rift was growing fast. But in December the speed of the rift went into overdrive, growing by a further 18km in

just a couple of weeks. What will become a massive iceberg (5000 sq.km) now hangs on to the shelf by a thread just 20km long.

- The researchers say that this is a geographical and not a climate event. The rift has been present for decades, they say, but it has punched through at this particular time.
- It is believed that climate warming has brought forward the likely separation of the iceberg but the scientists say they have no direct evidence to support this incidence.

Q3) The target of 90-90-90 is an ambitious global treatment target to help end which one of the following epidemics?

- a) HIV
- b) Cholera
- c) Tuberculosis
- d) Zika fever

Correct Answer: a

Explanation:

The UNAIDS 90-90-90 target calls on countries to reach the following goals:

90% of people living with HIV diagnosed by 2020

90% of diagnosed people on antiretroviral treatment by 2020

90% of people in treatment with fully suppressed viral load by 2020

Q4) Consider the following statements in the context of 'Biomarkers'.

1. WHO defines biomarkers as any measurement reflecting an interaction between a biological

system and a potential hazard, which may be chemical, physical, or biological.

2. Recently, Researchers identified specific metabolites that can potentially be used as biomarkers for distinguishing dengue and chikungunya infections by two viruses.

Which of the statements given above is/are correct?

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

Ans. (c)

Topic: S & T

Explanation: Recently, Researchers at Delhi's International Centre for Genetic Engineering and Biotechnology (ICGEB) have identified specific metabolites that can potentially be used as biomarkers for distinguishing dengue and chikungunya infections and co-infection by these two viruses. Both these virus infections exhibit similar and overlapping symptoms in patients because of which making differential diagnosis becomes challenging. It gets further complicated in the case of a co-infection.

Currently, antigen-based and antibody-based diagnostic tools are available for dengue, and the diagnosis can be made within the first few days after infection. However, in the case of chikungunya, the diagnostic tool is antibody-based. Antibodies take time to develop in a patient.

Q5) Recently, Havelock and Neil Islands, which were in the news, are located in

- a) Seychelles
- b) Maldives
- c) Lakshadweep
- d) Andaman and Nicobar Islands

Ans. (d)

Topic: Geography and current affairs

Explanation: Recently, Heavy overnight rains in the Andaman & Nicobar Islands have disrupted normal life in the islands developing into flood-like situation in north and middle Andamans.

Located about 40 km from state capital Port Blair, Havelock and Neil islands are the most popular tourist attractions of Andamans, and the worst affected. Nearly 450 tourists at Havelock islands and 500 at Neil islands had been stranded in the islands. The Indian Air Force launched an evacuation operation for rescue of tourists stranded at Havelock and Neil Islands in Andamans.

GS PAPER 2 RELATED

TOPIC: POLITY AND CONSTITUTION

The heckler's veto

<http://www.thehindu.com/opinion/Readers-Editor/the-hecklers-veto/article17532510.ece>

What is heckler's veto?

- The heckler's veto, according to legal scholars, is a process by which socially powerful groups can shut down critical or inconvenient speech by threatening public disorder or disturbance.
- One of the ways in which the lower courts encourage the heckler's veto is by granting an ex parte injunction against publication or broadcast of news.
- For instance, there are about 45 cases of ex parte injunctions against news media organisations in Karnataka alone.

Examples:

- The plight of artist M.F. Husain and of Salman Rushdie's *The Satanic Verses*, the forced exile from writing for Perumal Murugan, and the pulping of the earlier biography of the former Tamil Nadu Chief Minister, J. Jayalalithaa, written by Vaasanthi are some of the cases where the threat to freedom of expression came from powerful sections who could use their proximity to administrative power and the lacunae in our judicial systems with a sense of entitlement and impunity.

Upholding freedom of expression

- There are a number of Supreme Court judgments that have interpreted Article 19 of our Constitution, including the section dealing with 'reasonable restrictions', in a manner that upholds the principles of freedom of expression.
- Basic unity amidst diversity notwithstanding, India is a land of cultural contrarities, coexistence of many religions and anti-religions, rationalism and bigotry, primitive cults and materialist doctrines.
- The compulsions of history and geography and the assault of modern science on retreating forces of medieval ways — a mosaic like tapestry of lovely and un-lovely strands — have made large and liberal tolerance of mutual criticism
- **Justice Sanjay Kishan Kaul**, delivered in the **M.F. Husain case** a very sobering judgment: "A liberal tolerance of a different point of view causes no damage. It means only a greater self-restraint. Diversity in expression of views whether in writings, paintings or visual media encourages debate. A debate should never be shut out. 'I am right' does not necessarily imply 'You are wrong'. Our culture breeds tolerance — both in thought and in actions."

Article 19 of Constitution:

19. Protection of certain rights regarding freedom of speech etc

(1) All citizens shall have the right

(a) to freedom of speech and expression;

- (b) to assemble peaceably and without arms;
- (c) to form associations or unions;
- (d) to move freely throughout the territory of India;
- (e) to reside and settle in any part of the territory of India; and
- (f) omitted
- (g) to practise any profession, or to carry on any occupation, trade or business

(2) Nothing in sub clause (a) of clause (1) shall affect the operation of any existing law, or prevent the State from making any law, in so far as such law imposes reasonable restrictions on the exercise of the right conferred by the said sub clause in the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement to an offence

(3) Nothing in sub clause (b) of the said clause shall affect the operation of any existing law in so far as it imposes, or prevent the State from making any law imposing, in the interests of the sovereignty and integrity of India or public order, reasonable restrictions on the exercise of the right conferred by the said sub clause

(4) Nothing in sub clause (c) of the said clause shall affect the operation of any existing law in so far as it imposes, or prevent the State from making any law imposing, in the interests of the sovereignty and integrity of India or public order or morality, reasonable restrictions on the exercise of the right conferred by the said sub clause

(5) Nothing in sub clauses (d) and (e) of the said clause shall affect the operation of any existing law in so far as it imposes, or prevent the State from making any law imposing, reasonable restrictions on the exercise of any of the rights conferred by the said sub clauses either in the interests of the general public or for the protection of the interests of any Scheduled Tribe

(6) Nothing in sub clause (g) of the said clause shall affect the operation of any existing law in so far as it imposes, or prevent the State from making any law imposing, in the interests of the general public, reasonable restrictions on the exercise of the right conferred by the said sub clause, and, in particular, nothing in the said sub clause shall affect the operation of any existing law in so far as it relates to, or prevent the State from making any law relating to,

(i) the professional or technical qualifications necessary for practising any profession or carrying on any occupation, trade or business, or

(ii) the carrying on by the State, or by a corporation owned or controlled by the State, of any trade, business, industry or service, whether to the exclusion, complete or partial, of citizens or otherwise.

TOPIC: INTERNATIONAL RELATIONS

N. Korea tests powerful rocket engine

<http://www.thehindu.com/todays-paper/tp-international/n-korea-tests-powerful-rocket-engine/article17533639.ece>

Key Points:

North Korea has tested a powerful new rocket engine

Rocket engines are easily re-purposed for use in missiles. Outside observers say that the nuclear-armed Pyongyang's space programme is a fig leaf for weapons tests.

U.S., China to work together on N. Korea 'President Trump looks forward to enhancing understanding with Beijing'

<http://www.thehindu.com/news/international/us-china-to-work-together-on-n-korea/article17532811.ece>

Why in news?

- With warm words from Chinese President Xi Jinping on Sunday, U.S. Secretary of State Rex Tillerson ended his first trip to Asia since taking office with an agreement to work together with China on North Korea and putting aside trickier issues.

Key Points:

- China has been irritated at being repeatedly told by Washington to rein in North Korea's nuclear and missile programmes and the U.S. decision to base an advanced missile defence system in South Korea.
- Beijing is also deeply suspicious of U.S. intentions towards self-ruled Taiwan, which China claims as its own, with the Trump administration crafting a big new arms package for the island that is bound to anger China.

GS PAPER 3

TOPIC: INTERNAL SECURITY

Naga blockade in Manipur lifted

<http://www.thehindu.com/todays-paper/manipur-blockade-finally-lifted/article17533763.ece>

Key Points:

- The four-month economic blockade in Manipur, imposed by the United Naga Council (UNC), was lifted following the talks it had with the Union and the State governments.
- The UNC had imposed the blockade in protest against the creation of seven new districts by the then Congress-led government "as it was in contravention to Greater Nagalim" envisaged by the group.

- Tripartite talks succeeded in addressing the issues and the UNC has agreed to lift the economic blockade.
- The government of Manipur took note of the grievances of the UNC, including that of them not being consulted while creating the new districts.
- The government of Manipur will unconditionally release the arrested UNC leaders and all the cases related to economic blockade against the Naga tribal leaders and students' leaders will be closed.

Cabinet approves four GST Bills

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=159523>

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved the following four GST related bills:

1. The Central Goods and Services Tax Bill 2017 (The CGST Bill)
2. The Integrated Goods and Services Tax Bill 2017 (The IGST Bill)
3. The Union Territory Goods and Services Tax Bill 2017 (The UTGST Bill)
4. The Goods and Services Tax (Compensation to the States) Bill 2017 (The Compensation Bill)

The above four Bills have been earlier approved by the GST Council after thorough, clause by clause, discussion over 12 meetings of the Council held in the last six months.

The CGST Bill makes provisions for levy and collection of tax on intra-state supply of goods or services for both by the Central Government.

On the other hand, IGST Bill makes provisions for levy and collection of tax on inter-state supply of goods or services or both by the Central Government.

The UTGST Bill makes provisions for levy on collection of tax on intra-UT supply of goods and services in the Union Territories without legislature.

Union Territory GST is akin to States Goods and Services Tax (SGST) which shall be levied and collected by the States/Union Territories on intra-state supply of goods or services or both.

The Compensation Bill provides for compensation to the states for loss of revenue arising on account of implementation of the goods and services tax for a period of five years as per section 18 of the Constitution (One Hundred and First Amendment) Act, 2016.

Background:

The Government is committed to early introduction of GST, one of the biggest reforms, in the country as early as possible. GST Council has decided 1st July as the date of commencement of GST. The Finance Minister in his Budget Speech has mentioned that country-wide outreach efforts will be made to explain the provisions of GST to Trade and Industry.

MCQs:

Q1) Which of the following are restrictions on the freedom of speech and expression as specified in the Indian constitution?

1. Security of the state
 2. Public Order
 3. Morality
 4. Friendly relations with foreign states
- a) 1 and 2 only
 - b) 2 and 3 only
 - c) 1,2 and 4
 - d) All

Answer: D

Topic: Polity

Type: Conceptual

Explanation: Freedom of speech and expression is not absolute. There are 8 restrictions on the freedom of speech and expression. These are in respect of the sovereignty and integrity of the country. These restrictions are: Security of the state Friendly relations with foreign states Public Order Decency or morality Contempt of Court Defamation Incitement to offence Sovereignty and integrity of India.

Q2) Consider the statements:

1. GST is a uniform indirect tax levied on goods and services across a country.
2. Alcohol for human consumption has been exempted from the purview of GST.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Answer: C

Topic: Economy

Type: Conceptual

Explanation: GST is a uniform indirect tax levied on goods and services across a country. Many developed nations tax manufacture, sale and consumption using a single, comprehensive tax.

GST is also expected to disincentivize tax evasion, lower tax rates, and make business operations easier.

Alcohol for human consumption has been exempted from the purview of GST.

Q3) Which of the below statements about GST is/are incorrect?

1 The CGST (Central GST) Bill makes provisions for levy and collection of tax on intra-state supply of goods or services for both by the Central Government.

2 The UTGST (UT GST) Bill makes provisions for levy on collection of tax on intra-UT supply of goods and services in the Union Territories without legislature.

a) 1 only

b) 2 only

c) Both

d) None

Answer: D

Topic: Taxation, Economy

Type: Factual

Explanation: Both the statements are correct.

The CGST Bill makes provisions for levy and collection of tax on intra-state supply of goods or services for both by the Central Government.

On the other hand, IGST Bill makes provisions for levy and collection of tax on inter-state supply of goods or services or both by the Central Government.

The UTGST Bill makes provisions for levy on collection of tax on intra-UT supply of goods and services in the Union Territories without legislature.

Union Territory GST is akin to States Goods and Services Tax (SGST) which shall be levied and collected by the States/Union Territories on intra-state supply of goods or services or both.

GS PAPER 2

Topic: POLITY AND GOVERNANCE

Government Aims To Make India A Global Biotech Hub By 2020

<http://pib.nic.in/newsite/erelease.aspx?relid=159576>

- **Keypoints**

- The Minister of State for Science and Technology and Earth Sciences, has said that biotechnology will be the pioneer among the information based enterprises of the 21st century.
- Ministry called for endeavors to set up an appropriate biological community with supportable frameworks, especially in center points of rustic India.
- Research and development has been one of the key ranges stressed by the Prime Minister.
- Comprehensively, BIRAC has been hailed as a standout amongst the best government measures to make an empowering situation for innovative work to prosper in a nation.
- We intend to form India into a worldwide development center point by 2020 and BIRAC has prepared to convey on that order.
- The fifth Foundation Day themed 'Affecting the Biotech Innovation Ecosystem' was directed by and gone to by countless from the logical and industry parts both from inside the nation and supervises.
- BIRAC bolsters business people and new companies at various phases of advancement – from the ideation stage to overseeing protected innovation rights lastly to the commercialization of items. Diverse activities of BIRAC target distinctive phases of the advancement biological system from ideation stages to verification of-idea and late stage approval to item improvement.
- Since its origin in 2012, BIRAC has made about two dozen hatcheries the nation over and bolstered more than 350 new businesses. We solidly trust that social business is the way to making a comprehensive society and our administration is focused on giving all the fundamental support.
- The science and innovation area will assume a key part in the administration's Start-Up India Action Plan.
- The DBT, in accordance with the Start-Up India Action Plan has attempted various activities fixated on the three mainstays of a perfect development biological community – subsidizing, tutoring and limit building, and the framework to make an interpretation of logical research into business items.
- BIRAC executes its order through an extensive variety of high effect activities, giving access to hazard capital through focused financing, encouraging innovation exchange, and supporting protected innovation administration and handholding plans for biotech firms to make them comprehensively aggressive.
- Government is introducing steady approaches and evacuating administrative boundaries to make an environment of advancement and business enterprise in the nation.

Topic: POLITY AND GOVERNANCE

Filling HC vacancies on war footing: Khehar

<http://www.thehindu.com/todays-paper/filling-hc-vacancies-on-war-footing-khehar/article17547989.ece>

What's in news?

- Against the sanctioned strength of 1079 High Court judges, around fifty percent is vacant.
- Chief Justice J.S. Khehar– Filling of judicial vacancies in the High Court is progressing on a war footing.

Memorandum of Procedure for Appointment of Judges (Tussle between government and Judiciary)

- **National Security Clause-** Controversial- Government reserves the right to reject the name suggested by the collegiums if the person was found to be a national threat.
- **Right to reiterate-** The collegiums has reserved the right to reiterate a judicial name in case it is not satisfied with the government's reason for vetoing.

Key Facts

- Total sanctioned strength of judicial officers in district and subordinate courts- 21,320, filled posts- 16,383, Vacant – 4,937 (Facts not important).
- National Judicial Data grid –
Pendency of cases in district court- 2.7crore
Pending cases for over 10years- 10% of 2.7 crore.

Basic Information

- **National Judicial Data grid:**
 - ✓ NJDG will work as a monitoring tool to identify, manage & reduce pendency of cases.
 - ✓ The Supreme Court of India launched a public access portal of the National Judicial Data Grid (NJDG) for district courts to demystify the judicial process for the ordinary citizen.
 - ✓ The public access portal will disseminate national, state, district and court-wise information about institution and disposal of cases on a monthly basis.
 - ✓ The NJDG will also provides daily statistics on case pendency before the courts under the e-courts projects.

Topic: Representation of people act

Poll panel backs life ban on convicts

<http://www.thehindu.com/news/national/poll-panel-backs-life-ban-on-convicts/article17547637.ece>

What's in news?

- Public Interest Litigation Petition was filed in Supreme Court - “championing the cause of decriminalisation of politics,”
- The Election Commission has endorsed a public interest litigation petition in the Supreme Court seeking **life-long bar on convicts from contesting polls and entering the legislature.**
- **The Election Commission** - uniform ban would be in the spirit of fundamental rights of the Constitution, including the right to equality.
- **Present Scenario:**
 - ✓ Person, who is convicted, is debarred from contesting any elections for the period of his or her prison sentence and six years thereafter.
- **Other reformative suggested by Election Commission :**
 - ✓ De-criminalisation of politics.
 - ✓ Making bribery a cognisable offence.
 - ✓ Prohibition on advertisements 48 hours before elections.
 - ✓ A strict ban on paid news - recommended by the Law Commission in its 244th and 255th reports.
 - ✓ Fixing the maximum age criteria and minimum educational qualification- Election Commission said the issue was in legislative domain and would require amendments to the Constitution.

TOPIC: INTERNATIONAL RELATIONS

Modi to fast-track his visit to Oman

<http://www.thehindu.com/news/national/modi-to-fast-track-his-visit-to-oman/article17547632.ece>

Key Highlights:

- India had set up the **first bilateral infrastructure fund** with Oman, but the project has not moved as fast as expected.
- MoU on food security -for assured supplies of wheat, rice and sugar.

New Delhi, Kabul talks soon to boost trade

<http://www.thehindu.com/business/new-delhi-kabul-talks-soon-to-boost-trade/article17545921.ece>

What's in news?

India will soon hold talks with Afghanistan on ways to boost bilateral trade and investment.

Key Point:

- The first such meeting since January 2014, is aimed at mounting pressure on Islamabad to facilitate trouble-free transit of goods from India to Afghanistan through Pakistan (Wagah-Attari route).
- This is to help in the development of Afghanistan which is a land-locked and Least Developed Country (LDC) as well as to boost trade and investment in South Asia through better regional connectivity.
- The United Nations TIR (Transports Internationaux Routiers or International Road Transport) Convention facilitates trade and international road transport by permitting customs-sealed vehicles and containers to transit nations without them being generally inspected at border crossings. The Union Cabinet chaired by Prime Minister Narendra Modi had earlier this month granted its nod for India's accession to the TIR Convention. Pakistan and Afghanistan are also 'contracting parties' to the TIR Convention.
- Thanks to the Afghanistan-Pakistan Transit Trade Agreement (APTTA), Afghanistan can use Pakistan's territory for transit trade while Pakistan's goods can move through Afghanistan to nations bordering Afghanistan. However, Islamabad has not agreed to allow using APTTA for goods to be transported from India to Afghanistan through Pakistan's territory (via the Wagah-Attari route).
- India is keen to join APTTA and Afghanistan has backed India's readiness to be an APTTA member but Pakistan has so far rejected such a proposal.

Why India wants this?

- In the absence of transit route through Pakistan, India depends on other countries, including Iran, to send goods to Afghanistan even though it increases time and costs for Indian exporters.
- India is also planning to strengthen air cargo links with Afghanistan as well as help expedite the development of Chabahar Port in Iran to bypass the Pakistan route to increase trade relations with Afghanistan, Iran and Central Asian countries.
- The India-Afghanistan trade and investment meeting will also consider more support from India to Afghanistan through Line of Credit, especially the Buyer's Credit for project exports by Indian companies to Afghanistan.

GS PAPER 3

Topic: Economy

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi approves the four Goods and Services Tax (GST) related bills today

The GST law will be the biggest reform in the area of Indirect Taxes in the history of independent India

<http://pib.nic.in/newsite/erelease.aspx?relid=159576>

1. The Central Goods and Services Tax Bill 2017 (The CGST Bill)

- The **CGST Bill** makes provisions for levy and collection of tax on intra-state supply of goods or services for both by the Central Government.

2. The Integrated Goods and Services Tax Bill 2017 (The IGST Bill)

- IGST Bill makes provisions for levy and collection of tax on inter-state supply of goods or services or both by the Central Government.

3. The Union Territory Goods and Services Tax Bill 2017 (The UTGST Bill)

- The UTGST Bill makes provisions for levy on collection of tax on intra-UT supply of goods and services in the Union Territories without legislature. Union Territory GST is akin to States Goods and Services Tax (SGST) which shall be levied and collected by the States/Union Territories on intra-state supply of goods or services or both.



4. The Goods and Services Tax (Compensation to the States) Bill 2017 (The Compensation Bill)

- The Compensation Bill provides for compensation to the states for loss of revenue arising on account of implementation of the goods and services tax for a period of five years as per section 18 of the Constitution (One Hundred and First Amendment) Act, 2016.

• Advantages of GST

- By amalgamating an expansive number of Central and State charges into a solitary assessment, it would moderate cascading or double taxation collection significantly and prepare for a typical national market.
- The Goods and Services Tax will in this manner help in the acknowledgment of the goal of "One Nation, One Tax" and enhance the Ease of Doing Business atmosphere in the nation.
- It will likewise in a roundabout way advantage the normal man by decreasing the taxation rate particularly on the day by day buyer things of the regular man.

- Presentation of GST would likewise make Indian items focused in the local and universal markets.
- Thinks about demonstrate this would have a boosting sway on monetary development. It is normal that the usage of the Goods and Services Tax law will prompt an expansion in Gross Domestic Product (GDP) of the nation by 1-2%. This thus will prompt the making of greater work and increment in efficiency.

Topic: Economy

Review of implementation of SEZ Policy

<http://pib.nic.in/newsite/erelease.aspx?relid=159576>

Key highlights

- The Government, on the premise of **sources of info/recommendations got from partners** on the approach and operational system of the SEZ Scheme, occasionally **surveys the strategy and operational structure** of SEZs and takes essential measures in order to encourage expedient and viable usage of SEZ arrangement.
- The accompanying activities have been taken as of late for usage of the SEZ arrangement in the nation and resolve the issues in that:
 1. **Min Land Area prerequisite** for setting up of new SEZs has been diminished to half for Multi-item and Sector-particular SEZs.
 2. **Sectoral expansive banding** has been acquainted with envelop comparable/related territories under a similar Sector.
 3. Another part '**agro-based sustenance preparing**' division has been acquainted with support agro-based enterprises in SEZs.
 4. **Double utilization of offices** like Social and Commercial framework by SEZs and non-SEZs elements has been permitted keeping in mind the end goal to make SEZ operations more feasible.
 5. **Web based preparing of different exercises identifying** with SEZ Developers and Units has been presented for enhancing simplicity of working together.
- **What are SEZ's?**
 - A special economic zone (SEZ) is an area in which **business and trade laws are different from rest of the country.**
 - SEZs are located within a country's national borders, and their aims include: **increased trade, increased investment, job creation and effective administration.**
 - To encourage businesses to set up in the zone, **financial policies** are introduced. These policies typically regard investing, taxation, trading, quotas, customs and labour regulations.
 - Additionally, companies may be offered tax holidays, where upon establishing in a zone they are **granted a period of lower taxation.**
 - The creation of special economic zones by the host country may be motivated by the desire to attract foreign direct investment (FDI).

- The benefits a company gains by being in a special economic zone may mean it can produce and trade goods at a lower price, aimed at being globally competitive
- In some countries the zones have been criticized for being little more than Chinese labor camps, with workers denied fundamental labor rights.

Topic: Economy

Reliance Communications, Aircel merger gets CCI nod

<http://www.thehindu.com/todays-paper/tp-business/reliance-communications-aircel-merger-gets-cci-nod/article17547832.ece>

Why in news ?

- Reliance Communications on Monday said it had received the approval of the Competition Commission of India (CCI) for the demerger of its wireless division into Aircel Ltd. and Dishnet Wireless Ltd.

Basic Information:

- Competition Commission of India is a body of the Government of India responsible for enforcing The Competition Act, 2002 throughout India and to prevent activities that have an appreciable adverse effect on competition in India. It was established on 14 October 2003.
- The idea of Competition Commission was conceived and introduced in the form of The Competition Act, 2002. A need was felt to promote competition and private enterprise especially in the light of 1991 Indian economic liberalization.
- The Competition Act, 2002, as amended by the Competition (Amendment) Act, 2007, follows the philosophy of modern competition laws. The Act prohibits anti-competitive agreements, abuse of dominant position by enterprises and regulates combinations (acquisition, acquiring of control and Merger and acquisition), which causes or likely to cause an appreciable adverse effect on competition within India.

Topic: Economy

NPCI denies loophole in BHIM app

<http://www.thehindu.com/business/npci-denies-loophole-in-bhim-app/article17545914.ece>

What's in news ?

- National Payments Corporation of India (NPCI), which developed the application for the Unified Payment Interface (UPI), has denied reports about technical malfunction or vulnerability of the app.
- NPCI has done intensive testing, robust design of security controls and continuous monitoring of its UPI infrastructure. The environment in which BHIM or UPI is run by NPCI is highly secure and certified with best global practices like PCI DSS ISO 27001. The packages have also been audited by reputed IT security firms. NPCI has put in place adequate governance mechanism for banks to report any fraud or system issues and its redressal.
- While there were 19.16 million downloads of the BHIM app, only 5.1 million customers were able to link to it their bank accounts.

Basic Information :

- BHIM is a biometric payment system app using Aadhar platform, and is based on Unified Payment Interface (UPI) to facilitate e-payments directly through bank. It was launched to stress on the importance of technology and digital transactions. It can be used on all mobile devices, be it a smartphone or a feature phone with or without internet connection.
- The payments through the new system (BHIM App) can be made by just a thumb impression after the bank account is linked with Aadhaar gateway. Indeed, the technology through BHIM will empower poorest of the poor, small business and the marginalised section.

TOPIC: ECONOMY

CONCESSIONS UNDER APTA

<http://pib.nic.in/newsite/erelease.aspx?relid=159576>

- **Keypoints**
 - The Asia Pacific Trade Agreement (APTA, formerly the **Bangkok Agreement**) is an Agreement signed since 1975.
 - The current membership of APTA consists of six countries, namely, **Bangladesh, China, India, Lao PDR, Republic of Korea, and Sri Lanka.**
 - Three Rounds of tariff concessions have already been exchanged among the member countries till 2003.
 - The tariff concessions being granted to APTA member States, on Margin of Preference basis, are being expanded under the fourth round of exchange of tariff concessions.

- The APTA Ministerial Council has formally approved the implementation of the **fourth round of exchange of tariff concessions**.
- APTA is a preferential treaty based on Margin of Preference. Concessions on tariff lines offered by China and Korea, inter-alia, cover certain textiles and chemical products, which are likely to benefit the Indian exporters.
- Some of items on which concessions have been offered by China and Korea include certain organic and inorganic chemicals, knitted and crocheted fabrics, and articles of apparel and clothing accessories etc.

TOPIC: ENVIRONMENT

Graded Action Plan to reduce Urban Air Pollution

<http://pib.nic.in/newsite/erelease.aspx?relid=159576>

- **Keypoints**
 - "The Government has informed a **Graded Response Action Plan for Delhi and NCR**, which contains measures, for example, forbiddance on section of trucks into Delhi; restriction on development exercises, presentation of odd and even plan for private vehicles, closing of schools, conclusion of block furnaces, hot blend plants and stone crushers; closing down of Badarpur power plant, prohibition on diesel generator sets, junk consuming in landfills and employing of obviously contaminating vehicles and so forth.
 - The nature, extension and thoroughness of measures to be taken is connected to levels of contamination viz. Serious + or Emergency, extreme, Very poor, Moderate to poor and Moderate, after due thought by specialists concerned.
 - Significant systems/ventures to handle expanding air contamination in Indian urban communities and urban regions incorporate control and relief measures identified with emanations from autos, mechanical exercises, warning of National Ambient Air Quality Standards; plan of natural controls/statutes; setting up of observing system for appraisal of encompassing air quality; presentation of cleaner/substitute powers like vaporous fuel (CNG, LPG and so forth.), ethanol mixing; advancement of cleaner generation forms; propelling of National Air Quality Index; universalization of BS-IV by 2017; jumping from BS-IV to BS-VI fuel benchmarks by first April, 2020; extensive revisions to different Waste Management Rules and notice of Construction and Demolition Waste Management Rules; restriction on copying of leaves, biomass, city strong waste; advancement of open transport and system of metro, e-rickshaws, advancement of auto pooling, Pollution Under Control Certificate, path train, vehicle upkeep; establishment of on-line ceaseless (24x7) checking gadgets by real businesses; prohibition on blasting of sound transmitting saltines between 10 PM to 6 AM and so on; other than issuance of bearings under Section 18(1)(b) of Air (Prevention and Control of Pollution) Act, 1981 and under Section 5 of Environment (Protection) Act, 1986."

TOPIC: ENVIRONMENT

Measurement of Emissions

<http://pib.nic.in/newsite/erelease.aspx?relid=159576>

- **Keypoints**

- Emission Intensity is calculated by dividing 'Total greenhouse gas (GHG) emissions' by 'Total Gross Domestic Product (GDP)' of a country. India has committed to reduce emissions intensity of its GDP in its Nationally Determined Contribution (NDC) submitted to the United Nations Framework Convention on Climate Change (UNFCCC).
- Objective of decreasing Emissions intensity of GDP permits a nation to lessen its outflows even while its GDP develops.
- The NDC was surrounded by embracing a comprehensive procedure of counsels with key Ministries, State Governments, common society associations, think-tanks, and specialized and scholastic foundations. Every nation has picked its own metric for atmosphere activity.
- Every Mission under the National Action Plan on Climate Change (NAPCC) is freely tied down by individual Ministries accountable for executing the Mission.
- Taking after the Paris Agreement, the Missions keep on contributing to the proclaimed objective of lessening of emanations power of GDP as additionally other supportable advancement objectives delineated in the NDC.

TOPIC: ENVIRONMENTAL SCIENCE AND ECOLOGY

Green nod for Neutrino project suspended

<http://www.thehindu.com/news/national/green-nod-for-neutrino-project-suspended/article17547654.ece>

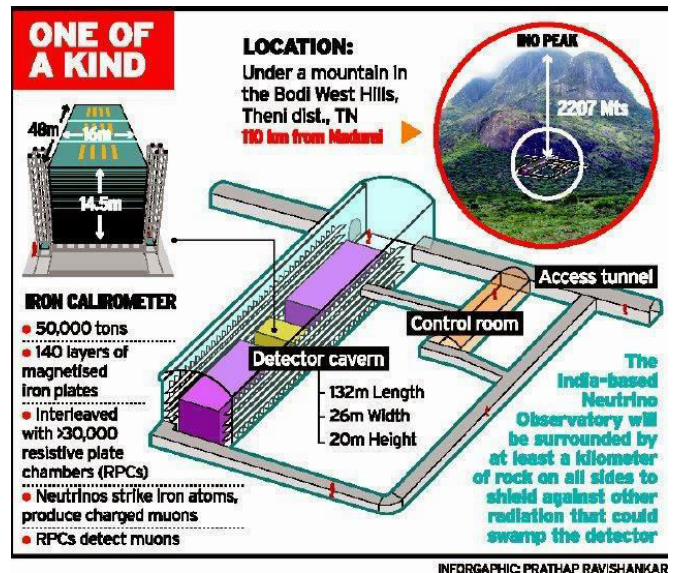
What's in news?

- Environmental Clearance granted to the India-based Neutrino Observatory(INO) –Theni by ministry of Environment has been suspended by National Green Tribunal.
- INO was granted environmental clearance as a **Category B** projects which required no Environmental Impact assessment studies.
- However, under the guidelines laid down by the Ministry, any project that falls within 5 km from an **inter-State boundary** or within a notified **national park or a sanctuary** has to be considered a Category 'A' project that involves a number of processes before an Environmental Clearances is granted.
- **Madhikettan Shola National** Park in Idukki district of Kerala was just about 4.9 km from the proposed project site and the **Tamil Nadu-Kerala** border was just a kilometre away, making it a **Category 'A' project**.
- INO should get clearances from the **National Board for Wildlife** as it was nearer to National Park

Basic Information:

India-based Neutrino Observatory (INO)

- The India-based Neutrino Observatory (INO) Project is a multi-institutional effort aimed at building a world-class underground laboratory with a rock cover of approx. 1200 m for non-accelerator based high energy and nuclear physics research in India.
- The initial goal of INO is to study neutrinos.
- Neutrinos are fundamental particles belonging to the lepton family. They come in three flavours, one associated with electrons and the others with their heavier cousins the muon and the Tau.
- According to standard model of particle physics, they are **mass less**. However recent experiments indicate that these charge-neutral fundamental particles, have finite but small mass which is unknown.
- **Determination of neutrino masses and mixing parameters is one of the most important open problems in physics today. The ICAL detector is designed to address some of these key open problems in a unique way.** Over the years this underground facility is expected to develop into a full-fledged underground science laboratory for other studies in physics, biology, geology, hydrology etc.

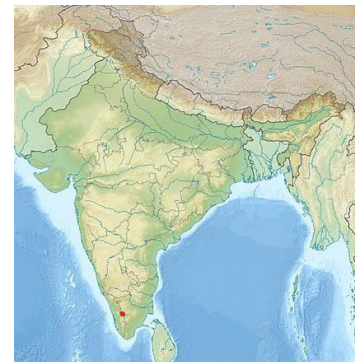


Mathikettan Shola National Park

- Mathikettan Shola National Park is a 12.82 km² national park in Poopara village of Udumbanchola taluk in Idukki district of Kerala state, South India.

National Board for Wild Life

- **Statutory Organization** constituted under the **Wildlife Protection Act, 1972**.
- Theoretically, the board is "advisory" in nature and advises the Central Government on framing policies and measures for conservation of wildlife in the country. However, it is a very important body because it serves as apex body to review all wildlife-related matters and approve projects in and around national parks and sanctuaries.
- **Composition:**



The National Board for Wildlife is chaired by India's Prime Minister and its vice chairman is Minister of Environment. Further, the board is mammoth body with 47-members including Parliament Members, NGOs, eminent conservationists, ecologists and environmentalists, Government secretaries of various departments, Chief of the Army Staff, Director General of Forests, tourism etc. etc.

▪ **Functions & Importance :**

Primary function of the Board is to promote the conservation and development of wildlife and forests.

It has power to review all wildlife-related matters and approve projects in and around national parks and sanctuaries.

No alternation of boundaries in national parks and wildlife sanctuaries can be done without approval of the NBWL.

Bear Cubs Sighted At Daroji Sanctuary

<http://www.thehindu.com/news/national/karnataka/bear-cubs-sighted-at-daroji-sanctuary/article17546970.ece>

Key Facts:

- Daroji Sloth Bear Sanctuary is located in Ballari district in Karnataka.
- It is spread over 82.72 km² (31.94 sq mi), biggest in Asia
- The sanctuary was created exclusively for the preservation of Indian Sloth Bear.
- It is about 50 km from Ballari and about 15 km from the World heritage site Hampi.

Efforts at sparrow conservation pick up pace across Odisha

<http://www.thehindu.com/todays-paper/tp-national/efforts-at-sparrow-conservation-pick-up-pace-across-odisha/article17548323.ece>

Key facts:

- Coastal Village - **Purunabandh** near Rushikulya rookery, where sparrow conservation efforts were taken up by locals way back in 2007.
- Successful experiments in sparrow conservation at Purunabandh have been replicated at several other places in Odisha .
- Local villagers involved in the protection of **olive ridley turtles** during their mass nesting at the coast were involved in the sparrow conservation activity.
- **Methods used**- With drastic reduction in the number of thatched houses, sparrows were not able to build nests. Specially-designed earthen pots, plywood boxes and coconut shells were made use of in order to build artificial nest for them.

Basic Information

- **Olive ridley sea turtle:** The olive ridley sea turtle (*Lepidochelys olivacea*), also known as the Pacific ridley sea turtle, is a medium-sized species of sea turtle found in warm and tropical waters, primarily in the Pacific and Indian Oceans. They can also be found in warm waters of Atlantic ocean.



Olive Ridley Sea Turtle

The olive ridley is classified as **Vulnerable** according to the **International Union for Conservation of Nature and Natural Resources (IUCN)**, and is listed in **Appendix I of CITES**. **These listings were largely responsible for halting the large scale commercial exploitation and trade of olive ridley skins.** The Convention on Migratory Species and the Inter-American Convention for the Protection and Conservation of Sea Turtles have also provided olive ridleys with protection, leading to increased conservation and management for this marine turtle.

- **Convention on the Conservation of Migratory Species of Wild Animals**
 - ✓ **Also known as** the Bonn Convention -- "Conservation and effective management of migratory species of wild animals require the concerted action of all States within the national jurisdictional boundaries of which such species spend any part of their life cycle."
 - ✓ It is an intergovernmental treaty, concluded under the aegis of **the United Nations Environment Programme**, concerned with the conservation of wildlife and habitats on a global scale.
 - ✓ **The CMS is the only global and UN-based intergovernmental organization established exclusively for the conservation and management of terrestrial, aquatic and avian migratory species throughout their range**
- **CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as the Washington Convention)** is a multilateral treaty to protect endangered plants and animals. It was drafted as a result of a resolution adopted in 1963 at a meeting of members of the International Union for Conservation of Nature (IUCN). Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species in the wild, and it accords varying degrees of protection to more than 35,000 species of animals and plants.

Ganga, Yamuna termed 'living persons'

<http://www.thehindu.com/news/national/ganga-yamuna-termed-living-persons/article17547682.ece>

What's in news?

- Uttarakhand High Court-declare that the rivers Ganga and Yamuna were **living persons** with all corresponding rights, duties and liabilities of a living person in order to preserve and conserve river Ganga and Yamuna.
- Facts: **New Zealand River Whanganui** became the first in the world to be granted a legal human status.
- Judgment -“To protect the recognition and the faith of society, rivers Ganga and Yamuna are required to be declared as legal persons [or] living persons”.
- The court ordered that the Director of the Namami Gange programme, the Uttarakhand Chief Secretary, and the Advocate-General of Uttarakhand would serve as **“parents”** for the rivers and would be the human faces to **“protect, conserve and preserve”** the rivers and their tributaries.



MISCELLANEOUS

Sign language dictionary to release in India soon

<http://www.thehindu.com/todays-paper/tp-national/sign-language-dictionary-to-release-in-india-soon/article17548183.ece>

Key Facts:

- The **Indian Sign Language** (ISL) dictionary, which is being developed by the **Indian Sign Language Research and Training Centre** (ISLRTC) graphic representations of signs.
- **It is a project under National Mission on Library under the aegis of Ministry of Culture.**
- The dictionary is being developed in both print and video formats.
- Contains graphic representations of popular signs used by the hearing impaired.
- It will have legal, technical and medical term.

MCQs :

1.Consider the statements :

1. BHIM(Bharat Interface for Money) is a biometric payment system app.
2. BHIM is linked using Aadhar platform.
3. It is developed by Google.

Which of the above statements is/are correct ?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

Answer : A

Topic : Economy

Type : Factual

Difficulty : Factual

Explanation:

BHIM is a biometric payment system app using Aadhar platform, and is based on Unified Payment Interface (UPI) to facilitate e-payments directly through bank.

It was launched to stress on the importance of technology and digital transactions. It can be used on all mobile devices, be it a smartphone or a feature phone with or without internet connection.

2. Consider the following statement with reference to Daroji sanctuary

- a. The sanctuary was created exclusively for the preservation of Indian Sloth Bear.
- b. It is located in Bellari district in Karnataka.
- c. Both A and B
- d. None of the Above

Correct answer: C

Type: Environment Science

Level: Moderate

Explanation:

- Daroji Sloth Bear Sanctuary is located in Ballari district in Karnataka.
- It is spread over 82.72 km² (31.94 sq mi), biggest in Asia
- The sanctuary was created exclusively for the preservation of Indian Sloth Bear.
- It is about 50 km from Ballari and about 15 km from the World heritage site Hampi.

3. Consider the following statement with reference to India-based Neutrino Observatory (INO)

- A. India-based Neutrino Observatory (INO) located in Theni, Tamilnadu .
- B. Main aim of the project is to determine the neutrino mass
- C. Both A and B
- D. None of the above

Correct answer: C

Type: Science and Technology

Level: Moderate

Explanation:

Determination of neutrino masses and mixing parameters is one of the most important open problems in physics today. The ICAL detector is designed to address some of these key open problems in a unique way. Over the years this underground facility is expected to develop into a full-fledged underground science laboratory for other studies in physics, biology, geology, hydrology etc.

Environmental Clearance granted to the India-based Neutrino Observatory(INO) – Theni by ministry of Environment has been suspended by National Green Tribunal.

4. Consider the following with respect to “National Mission on libraries”

- 1. It is an initiative under the ministry of Human resource development.
- 2. National Virtual Library is the new project under this mission.

Identify the incorrect statements

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None of the above

Answer: a

Topic: Governmental Schemes

Explanation:

National Mission on Libraries has been set up by Ministry of Culture, Government of India, in pursuance of National Knowledge Commission recommendations for sustained attention for development of Libraries and Information science Sector.

The components of National Mission on Libraries are:-

- Creation of National Virtual Library of India (NVLI) to facilitate a comprehensive database on digital resources on information about India and on information generated in India, in an open access environment.
- Setting up of NML Model Libraries. The NML will cover 35 State Central Libraries, 35 District Libraries and 6 Libraries under the Ministry of Culture. Funds approved for modernization of various State and Central Libraries is at Annexure-I.
- Quantitative & Qualitative Survey of Libraries to prepare a baseline data of libraries in India through a survey of 5000 Libraries. The work has been assigned to Indian Market Research Bureau (IMRB).
- Capacity Building to enhance the professional competence of library personnel. INFLIBNET has conducted trainings in this regard.

TERMS IN NEWS:

1. Range state is a term generally used in zoogeography and conservation biology to refer to any nation that exercises jurisdiction over any part of a range where certain species, taxon or biotope dwell, or cross or fly over at any time during its normal migration route.
2. Range state concept is often used by international conservation organizations in formulating their conservation and campaigning policy.

G.S. Paper -2

Topic: Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.

1. Budget 2017: Aadhaar number to be a must for filing I-T return

http://www.business-standard.com/article/economy-policy/income-tax-returns-to-require-aadhaar-number-117011901085_1.html

What's in news?

- Government has made Aadhaar compulsory for individuals applying for PAN(Permanent Account Number) and for those who are filing income tax returns from July 1 2017.
- Aadhaar is now mandatory to obtain benefits under the following programs
 - a) Pradhan Mantri Kaushal Vikas Yojana
 - b) Self Employment Scheme for Rehabilitation of Manual Scavengers
 - c) National Food Security Act to get subsidized food grains
 - d) Mahatma Gandhi National Rural Employment Act
 - e) Mid-Day meals Scheme
 - f) Pension benefits under the Employees Pension Scheme.

Topic: Issue related to health

2. HIV patients unhappy with Bill

<http://www.thehindu.com/sci-tech/health/hiv-patients-unhappy-with-bill/article17566541.ece>

The Human Immunodeficiency Virus And Acquired Immune Deficiency Syndrome (Prevention And Control) Bill, 2014: The Bill seeks to prevent and control the spread of HIV and AIDS, prohibits discrimination against persons with HIV and AIDS, provides for informed consent and confidentiality with regard to their treatment, places obligations on establishments to safeguard their rights, and creates mechanisms for redressing their complaints.

Prohibition of discrimination against HIV positive persons: The Bill lists the various grounds on which discrimination against HIV positive persons and those living with them is prohibited. These include the denial, termination, discontinuation or unfair treatment with regard to: (i) employment, (ii) educational establishments, (iii) health care services, (iv) residing or renting property, (v) standing for public or private office, and (vi) provision of insurance (unless based on actuarial studies). **The requirement for HIV testing as a pre-requisite for obtaining employment or accessing health care or education is also prohibited.**

Every HIV infected or affected person below the age of 18 years has the **right to reside in a shared household and enjoy the facilities of the household**. The Bill also prohibits any individual from publishing information or advocating feelings of hatred against HIV positive persons and those living with them.

Informed consent and disclosure of HIV status: The Bill requires that no HIV test, medical treatment, or research will be conducted on a person without his informed consent. No person shall be compelled to disclose his HIV status except with his informed consent, and if required by a court order. Informed consent for an HIV test will not be required in case of screening by any licensed blood bank, a court order, medical research, and epidemiological purposes where the HIV test is anonymous and not meant to determine the HIV status of a person. Establishments keeping records of information of HIV positive persons shall adopt data protection measures.

Role of the central and state governments: The central and state governments shall take measures to: (i) prevent the spread of HIV or AIDS, (ii) provide anti-retroviral therapy and infection management for persons with HIV or AIDS, (iii) facilitate their access to welfare schemes especially for women and children, (iv) formulate HIV or AIDS education communication programmes that are age appropriate, gender sensitive, and non stigmatizing, and (v) lay guidelines for the care and treatment of children with HIV or AIDS. Every person in the care and custody of the state shall have right to HIV prevention, testing, treatment and counselling services.

Role of the Ombudsman: An ombudsman shall be appointed by each state government to inquire into complaints related to the violation of the Act and the provision of health care services. The Ombudsman shall submit a report to the state government every six months stating the number and nature of complaints received, the actions taken and orders passed.

Guardianship: A person between the age of 12 to 18 years who has sufficient maturity in understanding and managing the affairs of his HIV or AIDS affected family shall be competent to act as a guardian of another sibling below 18 years of age. The guardianship will be apply in matters relating to admission to educational establishments, operating bank accounts, managing property, care and treatment, amongst others.

Court proceedings: Cases relating to HIV positive persons shall be disposed off by the court on a priority basis. In any legal proceeding, if an HIV infected or affected person is a party, the court may pass orders that the proceedings be conducted (a) by suppressing the identity of the person, (b) in camera, and (c) to restrain any person from publishing information that discloses the identity of

the applicant. When passing any order with regard to a maintenance application filed by an HIV infected or affected person, the court shall take into account the medical expenses incurred by the applicant.

What's in news?

- Rajyasabha passed The Human Immunodeficiency Virus And Acquired Immune Deficiency Syndrome (Prevention And Control) Bill, 2014.
- Civil society organizations raised concerns against the "as far as possible" clause and said this will "dilute" the provision and allow state governments to deny treatment to many patients.

Key Facts:

Global Burden of Diseases (GBD)-2015

- 21 lakh persons estimated to be living with HIV in India
- 25.82% percentage of patients receives anti-retroviral therapy (ART) treatment as against global percentage of 41%

Problems in India:

- HIV programme has weakened due to budget cuts
- Nationwide stock-outs of diagnostic kits and pediatric formulations of anti-retrovirals (ARTs).

Topic: Bilateral issue

3. New Delhi gets ready to welcome Turkish President

<http://www.thehindu.com/news/national/new-delhi-gets-ready-to-welcome-turkish-president/article17566251.ece>

Friction areas :

- **Turkey is having strategic partnership with Pakistan.**
- **India's membership to Nuclear Suppliers Group-** Turkey has backed a "Process-based" approach for inducting members. It supports both Pakistan as well as India to be considered for membership.
- Kashmir Issue: **Turkey fully supports Pakistan's position on Jammu and Kashmir**
- Turkey is also a member of the **Uniting for Consensus group of countries** that **oppose U.N. Security Council Memberships to be increased.**

G.S. Paper -3

Topic: Security Issue

1. '88 youth took to militancy in 2016'

<http://www.thehindu.com/news/national/88-youth-took-to-militancy-in-2016/article17567153.ece>

Key Facts:

- **2014, the number of Kashmiri youth joining militancy was somewhere around 53 and in 2015, it reached 66 before touching the highest mark in six years (88) in 2016.**
- **119 incidents of infiltration across the border in 2016**

Reasons:

Internal factors

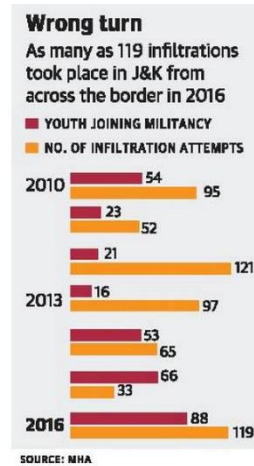
1. **Unemployment** gives rise to discontent. Unemployed youth are lured into terrorism by giving hopes of support to family and self.
2. **Communalism** develops a sense of insecurity in the minorities and govt's mishandling of the situation or politicisation of the issue further pushes youth to radicalization.
3. Lack of development is seen by the locals as govt apathy and leads to alienation of youth which makes the man easy target for the fundamentalist groups
4. Police and armed force excesses like AFSPA act in disturbed areas of J n K and NE has lead to further alienation of youth
5. Lack of intelligence, police coordination and action to check and nip in the bud the tendencies of youth towards radicalization adds to the number of radical youth influencing others to join in.

External factors

1. Infiltration of terrorist across borders, which in turn disturb peace in the region and misguide youth in the name of religion
2. Instigation in public forum like the statements made by Pakistani officials, clergy
3. Use of social media by terrorists organization to recruit, garner support.
4. State sponsoring of terrorism from across the border.

Measures

1. Employment and development measures in these areas
2. Action against communal elements
3. Improving border security measures-intelligence, logistics
4. Educating the people of the region about the harms terrorism would cause to themselves and society
5. Limiting the use of AFSPA and/or improving it in terms of powers and responsibility of armed forces



Topic: Economy

2. 'GST an opportunity to remove anomalies in tobacco taxation'

<http://www.thehindu.com/news/national/other-states/gst-an-opportunity-to-remove-anomalies-in-tobacco-taxation/article17567165.ece>

What's in news?

- Tobacco farmers and farm workers of commercial crops have asked the Centre to protect their interests while formulating the Goods and Services Tax (GST) laws.
- Government should look into the existing anomalies that exist in Tobacco taxation system, urges tobacco farmers. Prevailing taxation system has affected the livelihoods of majority tobacco farmers and has promoted smuggling of cigarettes (The steep increase in excise duty in the past has led to increased smuggling,).
- The GST is an opportunity to remove tax arbitrage in tobacco taxation and disincentives illegal products.

Topic: Economy (GS 3)

3. Unlisted companies investing through PEs, angel funds 'Twin balance sheet' issue still curbs funds from large firms

<http://www.thehindu.com/business/unlisted-companies-investing-through-pes-angel-funds/article17566148.ece>

'Twin balance sheet' issue still curbs funds from large firms

What's in news ?

- Unlisted companies have been investing large amounts through the private equity fund route, angel funds and start-ups, even as investments from large Indian corporates remain constrained by the 'twin balance sheet' problem.
- Foreign direct investment has become all the more important in this situation of subdued investment by large companies in India, and the government has taken several steps to make India one of the most favoured investment destinations in the world.

Moving towards Open Economy :

- FDI has become important because the perception is that domestic investment was subdued.
- India has become one of the most open economies in the world. India has even allowed 100% FDI in sectors like civil aviation. And apart from opening up,

India has allowed most of the investment through the automatic route, which doesn't require government approvals.

4. Centre eyes ways to open multibrand retail

<http://www.thehindu.com/business/centre-eyes-ways-to-open-multibrand-retail/article17566132.ece>

Why in news ?

- In a bid to ease Foreign Direct Investment (FDI) norms related to Multi-brand Retail Trading (MBRT), the Centre is looking at ways to get around the BJP's 2014 Election Manifesto that categorically ruled out FDI in the 'politically sensitive' sector.
- While the Centre is considering various options including allowing FDI in MBRT of certain non-food items such as health and wellness products, with a rider that they should be locally manufactured.

Condition of Local sourcing to benefit our farmers

- The policy stipulates many conditions including on a specified level of minimum investment and local sourcing. This is not being implemented because several states through their respective Shops & Establishment Act, do not currently allow foreign-owned and controlled firms to open multi-brand retail outlets in their territory.
- In order to generate employment in food processing and to attract the latest technologies in the sector, the NDA government, allowed 100% FDI under the government approval route for trading, including e-commerce, in respect of food products manufactured and/or produced in India.

Topic: Development

5. India slips in human development index

<http://www.thehindu.com/news/national/india-slips-in-human-development-index/article17566555.ece>

What's in news?

- **Human Development Report 2016 – United Nations Development Programme**
 - ✓ World's top three countries -Norway (0.949), Australia (0.939) and Switzerland (0.939).
 - ✓ India's current Ranking-131 (previous year ranking 130).

- ✓ India's HDI value increased from 0.428 in 1990 to 0.624 in 2015- lowest rank among BRIC nations. However, its average annual growth in HDI (1990-2015) was higher than that of other medium HD countries.
- ✓ HDI value-0.624; Category- Medium Human Development.
- ✓ India's Ranking Among SAARC countries
 - 3rd Rank.
 - Sri Lanka (73 rank), Maldives (105 rank) – both of them fall under –High Human Development Category.
- **HDI report praised India's reservation policy and National Rural Employment Programme :**
 - ✓ Substantial positive effect
 - ✓ In 1965, for example, Dalits held fewer than 2% of senior civil service positions, but the share had grown to 11% by 2001
 - ✓ The national rural employment guarantee programme prime example of “**combining social protection with appropriate employment strategies**”.
- **South Asian region:**
 - ✓ 1.5 million people worldwide still live in multidimensional poverty, 54% of them concentrated in South Asia
 - ✓ Over a period of 1990-2015, Inequality sharpened in this region .
 - ✓ Highest levels of malnutrition at 38%
 - ✓ Lowest Public Health Expenditure as a percentage of GDP -1.6%
 - ✓ Improved life expectancy by 10.4 years (1990-2015)
 - ✓ Child malnutrition declined by 10 percentage points from 2015
- **Gender disparity**
 - ✓ Women, on an average, have **lower HDI** than men across the world.
 - ✓ South Asia- Largest gender disparity, where the female HDI value is 20% lower than the male value.

Miscellaneous:

1. Railways must take food safety seriously

<http://www.thehindu.com/business/railways-must-take-food-safety-seriously/article17566140.ece>

What's in news ?

- The Food Safety and Standards Authority of India (FSSAI) raised concerns on food hygiene on trains and asked the Indian Railways to redesign coaches so that food served on trains are not stacked next to the lavatories.

- If one looks at our catering services function on board, first thing that happens is that the food items are stacked next to the toilets.
- When people carry their own food, there is no place for disposal. So hygiene and sanitation is something that has to be looked at seriously.

Solution and Way Forward :

- Re-engineering of coaches has to be done on the longer run as passengers are “hesitant to approach the wash basins” on trains due to poor hygiene conditions.
- Providing safe drinking water on trains is another major issue and water dispensing machines may be installed on board.
- FSSAI has formulated a ‘Safe Food on Track’ programme for training supervisors of catering units at railway stations, food vendors and on board catering units on food safety.
- The FSSAI further suggested a host of steps to create awareness related to food safety at railway stations and on trains. These include printing of food safety tips on food tray covers to onboard passengers, display of food safety tips in railway coaches and the use of food safety display boards at various food establishments at the railway stations.

Terms in news

1. **Hinterland:** An area behind a coast or the shoreline of a river. Specifically, by the doctrine of the hinterland, the word is applied to the inland region lying behind a port and is claimed by the state that owns the coast.

Prelims worthy questions:

1. Miyar hydroelectric project is on the tributary of
 - A. Ravi
 - B. Beas
 - C. Chenab
 - D. Sutlej

Correct Answer- C

Topic: Current Affair

Level: Easy

Explanation: **Miyar Hydroelectric Project** is located in District Lahaul and Spiti, Himachal Pradesh on the Miyar Nallah which is a major tributary of Chenab River.

2. Choose the correct statement with reference to Uniting for Consensus group.
- A. Uniting for Consensus (UfC) is a movement opposing the possible expansion of permanent seats in the United Nations Security Council.
 - B. Uniting for Consensus (UfC) is a movement supporting the possible expansion of permanent seats in the United Nations Security Council.
 - C. Uniting for Consensus (UfC) is a movement to support the inclusion of new members into NSG group.
 - D. None of the above

Correct Answer- C

Topic: Current Affair

Level: Easy

- Explanation: Uniting for Consensus (UfC) is a movement, nicknamed the Coffee Club, that developed in the 1990s in opposition to the possible expansion of permanent seats in the United Nations Security Council. Under the leadership of Italy

3. Consider the statements about Food Safety and Standards Authority of India (FSSAI).

- 1. It is a constitutional body.
- 2. FSSAI is responsible for protecting and promoting public health through the regulation and supervision of food safety.

Which of the above statements is/are correct ?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Answer : B

Topic : Indian Economy

Type : Factual

Difficulty: Easy

Explanation:

Food Safety and Standards Authority of India (FSSAI) is an autonomous body established under the Ministry of Health & Family Welfare, Government of India. The FSSAI has been established under the Food Safety and Standards Act, 2006 which is a consolidating statute related to food safety and regulation in India. Hence it is **statutory body** and **not constitutional body**.

FSSAI is responsible for protecting and promoting public health through the regulation and supervision of food safety.

G.S. PAPER -2

TOPIC: POLITY

1. EC freezes 'two leaves' for R.K. Nagar bypoll

<http://www.thehindu.com/news/national/tamil-nadu/aiadmks-two-leaves-symbol-frozen/article17588821.ece>

What's in news?

- AIADMK's "Two Leaves" symbol frozen by The Election Commission, prohibiting its use in the coming R.K. Nagar by-election in Chennai.
- **Reason and other restrictions**
 - ✓ Split in the party – two groups
 - ✓ Till the final settlement of the dispute, neither group was permitted to use the name 'All India Anna Dravida Munnetra Kazhagam.
 - ✓ Groups to choose their own names and if desire link that with their parent party
 - ✓ Both the groups shall also be allotted different symbols as they may choose from the list of free symbols notified by the Election Commission for the purpose of the byelection.
- **Guidelines to resolve the dispute:**
 - ✓ Supreme Court has upheld **Test of majority** in case of a split in the party as per Para 15 of the Election Symbols (Reservation and Allotment) Order.

Basic Information:

- **Election Symbols (Reservation & Allotment) order, 1968**
 - ✓ Relates to specification, reservation and allotment of symbols
 - ✓ Order also makes provisions for the recognition of parties as National and State Parties
 - ✓ Para 15 of the Symbols Order, 1968, states: "When the Commission is satisfied that rival group or section claim the party symbol then EC consider all the available facts ,circumstances and hearing and give judgment which is binding on all sections and group".

2. 'Peaceful rallies a fundamental right'

<http://www.thehindu.com/todays-paper/tp-national/tp-otherstates/peaceful-rallies-a-fundamental-right/article17596488.ece>

What's in news?

- **Orissa High Court upholds Fundamental rights granted under Constitution of India**

- ✓ Holding peaceful rallies and dharna are the fundamental right of citizens guaranteed under Indian Constitution
- ✓ Any application seeking permission for such rallies and dharna in Odisha should be promptly dealt with by the concerned authorities.
- ✓ If permission is refused, reasonable grounds should be given in the rejection order.
- ✓ If no action is taken by the authority concerned within three days or 72 hours, whichever is later from the date/time of the receipt of the application, it will be deemed that the permission has been granted.

3. Law coming to enforce dam safety regulations

<http://www.thehindu.com/news/national/law-coming-to-enforce-dam-safety-regulations/article17588372.ece>

What's in news?

- A new **Institutional mechanism** to improve safety in India's 5300-odd dams.
- Currently, guidelines in this regard are not effectively enforced by the States.
- The new law proposes a **Central authority and State-level bodies** that will enforce regulation.
- Dam and project proponents falling short could face a fine.
- Safety Criteria's
 - a) Increasing the spillway (a design structure to ease water build-up)
 - b) Preventing 'over-topping' in which the dam overflows and causes it to fail.
- Present scenario: Recent analysis of the state of India's dams found that half of the dams did not meet contemporary safety standards.

Key Facts:

- **Kerala and Tamil Nadu** fights over threats posed by the Mullaperiyar dam on the river Periyar.
- In 2014, an unscheduled release of water from the Larji hydroelectric project into the Beas River drowned 25 students from Hyderabad.
- 1979 Machchu dam failure in Morbi, Gujarat, is estimated to have killed at least 25,000.

4. Allow liquor outlets closer to highways: TN

<http://www.thehindu.com/news/national/tamil-nadu/reduce-ambit-of-highway-liquor-ban-tamil-nadu-to-supreme-court/article17583524.ece>

Background:

- December 15, 2016 judgment: Supreme Court has banned sale of liquor within 500 meters of National and State highways.
- Ban was necessary to curb **drunken-driving**. Main culprit behind a large number of road accidents and tragic deaths.

What's in news?

- The Tamil Nadu government has moved an application in the Supreme Court for modification of its previous judgment on banning liquor within 500 metres of National and State highways.
- The State, which originally moved the Supreme Court in appeal against a **Madras High Court decision**, sought the distance of 500 metres from the outer edge of the highways to be reduced to a distance of 100 metres.
- The State has also asked the Supreme Court to extend the time for re-location of retail liquor vending shops located on the highways till the expiry of their licence period.
- Tamil Nadu has further requested the apex court to **exempt those shops located on highway stretches which come under the corporation and municipality limits**.
- In order to circumvent the ban, States are converting State highways to other form of roads like major district roads, district roads and village roads.

5. SC summons Chief Secretaries of 9 drought-affected States

<http://www.thehindu.com/news/national/sc-summons-chief-secretaries-of-9/article17591579.ece>

What's in news?

- The Supreme Court summoned Chief Secretaries of nine drought-affected States, including Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh, Maharashtra, Jharkhand, Bihar, Haryana, Chhattisgarh and Gujarat, for having failed to implement the **National Food Security Act**.
- Lack of proper implementation depicts lack of concern towards Parliamentary statute.
- It is a violation of Article 21 [protection of life and personal liberty] of the Constitution.
- State Food Commissions, as mandated by National Food Security Act, have not been appointed
- State governments have failed to frame rules for the appointment or designation of the District Grievance Redressal Officer

- The court has also directed the Chief Secretaries to inform whether a social audit can be conducted, as provided under the Food Security Act.

6. Tribunals face axe amid downsizing

<http://www.thehindu.com/todays-paper/tp-business/8-tribunals-face-axe-amid-downsizing/article17595798.ece>

What's in news?

- The Centre has decided to wind up eight tribunals:
 - ✓ The Competition Appellate Tribunal
 - ✓ The Airports Economic Regulatory Authority Appellate Tribunal (AERAAT)
 - ✓ The Cyber Appellate Tribunal
 - ✓ The EPF Appellate Tribunal and others
 - ✓ The National Highways Tribunal

These tribunals currently deal exclusively with disputes pertaining to employees' provident fund or EPF, Competition law, Airports' economic regulation, Information Technology law, National highways, railways, copyrights and foreign exchange.
- The Airports Economic Regulatory Authority Appellate Tribunal (AERAAT) and The Cyber Appellate Tribunal, —will now be discharged by the **Telecom Disputes Settlement and Appellate Tribunal (TDSAT)**.
PRS Legislative Research- the TDSAT may not have the expertise to adjudicate matters relating to pricing of airport services.
- The Competition Appellate Tribunal, whose work will now be transferred to **the National Company Law Appellate Tribunal**
- The EPF Appellate Tribunal's remit would be transferred to the Industrial Tribunal that examines matters under the Industrial Disputes Act of 1947
- Cases under the Foreign Exchange Management Act of 1999 would be transferred from the dedicated tribunal for foreign exchange matters to the Appellate Tribunal constituted under the Smugglers and Foreign Exchange Manipulators (Forfeiture of Property) Act of 1976.
- Highway disputes will now be adjudicated by the Airport Appellate Tribunal .
- The Railways Rates Tribunal for hearing matters under the Railways Act of 1989 will also cease to exist, with its workload transferred to the Railway Claims Tribunal set up under a 1987 law.
- The Copyright Act of 1957, decisions under which are currently reviewed by the Copyright Board, will now be transferred to the Intellectual Property Appellate Board set up under the Trademarks Act of 1999.

TOPIC: INTERNATIONAL RELATIONS

1. China reaches out to West Asia

<http://www.thehindu.com/news/international/china-reaches-out-to-west-asia/article17592768.ece>

What's in news?

- China turning its attention towards West Asia.
- **'Made in China-2025'** strategy of transitioning China's manufacturing to the advanced level by leveraging the Internet, Big Data and robotics among the key tools.
- China is pursuing the **industry 4.0** model pioneered by Germany.
- **China – Israel**
 - ✓ Announced : **Innovative comprehensive partnership**
 - ✓ Maximising absorption of Israel's technology in hi-tech and other advanced domains.
 - ✓ Top priority area- clean energy, agriculture, investment, finance and medical services
- **China-Saudi Arabia**
 - ✓ Focus: Energy and infrastructure.
 - ✓ China to support "Saudi Vision 2030" plan — a blueprint for reducing Riyadh's dependence on oil, and reliance on other drivers of the economy such as infrastructure development.
- China is having good relationship with Iran.
- China and Russia have been active partners preventing "regime change" in Syria, which is also strongly backed by Iran.
- China's ability to influence the region still lags behind the U.S., the EU and even Russia. So China should mainly focus on economic cooperation in this area rather than geopolitical interests.

GS – 3 RELATED

TOPIC : SCIENCE AND TECHNOLOGY

1. Scientists launch campaign to restore Pluto to the planet club

<http://www.reuters.com/article/us-space-pluto-idUSKBN16S2GU>

What's in news?

- Campaign has been launched by a team of scientist to restore planet hood status to Pluto
- In a paper presented at an international planetary science conference at The Woodlands, Texas, the scientists explained that geological properties, such as **shape and surface features**, should determine what constitutes a planet.
- At present Pluto has been considered as Dwarf Planet along with Ceres as per International Astronomical Union Classification.

Basic information:

- **Ceres:** the biggest object in the asteroid belt between Mars and Jupiter.
- **Dwarf Planets:** A dwarf planet is an object in orbit around the Sun that is large enough (massive enough) to have its own gravity pull itself into a round (or nearly round) shape. Generally, a dwarf planet is smaller than Mercury. A dwarf planet may also orbit in a zone that has many other objects in it. For example, an orbit within the asteroid belt is in a zone with lots of other objects.
At present there are five dwarf planets- Ceres, Pluto, Eris, Makemake and Haumea.
- **IAU Classification of planets:**
A planet is a celestial body that
 - (a) Is in orbit around the Sun,
 - (b) Has sufficient mass for its self-gravity to overcome rigid body forces so that it assumes a hydrostatic equilibrium (nearly round) shape, and
 - (c) Has cleared the neighborhood around its orbit.
- **Kuiper Belt:** Beyond the gas giant Neptune lies a region of space filled with icy bodies. Known as the Kuiper Belt, this chilly expanse holds trillions of objects, remnants of the early solar system.
In 1951, astronomer Gerard Kuiper predicted the existence of a belt of icy objects that now bears his name. Some astronomers refer to it as the Edgeworth-Kuiper Belt.
Astronomers are now hunting for a planet in the Kuiper Belt, a true ninth planet, after evidence of its existence was unveiled on Jan. 20, 2016. The so-called "Planet Nine," as scientists are calling it, is about 10 times the mass of Earth and 5,000 times the mass of Pluto.



2. Indian-origin Doctor reconstructs jaw using 3D printer in United Kingdom

<http://www.financialexpress.com/technology/indian-origin-doctor-reconstructs-jaw-using-3d-printer-in-united-kingdom/598097/>

What's in news?

- An Indian-origin surgeon in the UK, with the help of a 3D printer, has successfully reconstructed a 53-year-old cancer patient's jaw using bone from one of his legs.

What is 3D printer?

- 3D printing or additive manufacturing is a process of making three dimensional solid objects from a digital file.
- The creation of a 3D printed object is achieved using additive processes. In an additive process an object is created by laying down successive layers of material until the object is created. Each of these layers can be seen as a thinly sliced horizontal cross-section of the eventual object.
- A **printable organ** is an artificially constructed device designed for organ replacement, produced using 3D printing techniques. The primary purpose of printable organs is in transplantation.
3D printing allows for the layer-by-layer construction of a particular organ structure to form a cell scaffold. This can be followed by the process of cell seeding, in which cells of interest are pipetted directly onto the scaffold structure.
Modified inkjet printers have been used to produce three-dimensional biological tissue. Printer cartridges are filled with a suspension of living cells and a smart gel, the latter used for providing structure. Alternating patterns of the smart gel and living cells are printed using a standard print nozzle, with cells eventually fusing together to form tissue. When completed, the gel is cooled and washed away, leaving behind only live cells.

TOPIC: ECONOMY

1. Oil prices a major hurdle: FM

<http://www.thehindu.com/business/oil-prices-a-major-hurdle-fm/article17588869.ece>

Major hurdles facing the economic:

- ✓ Uncertain Oil Prices
- ✓ Slow Global Growth
- ✓ NPA's
- ✓ Ramping up private investment

2. Bankruptcy board spells out 'eligibility'

<http://www.thehindu.com/business/bankruptcy-board-spells-out-eligibility/article17588574.ece>

Why in news?

- The first order issued by the recently-established Insolvency and Bankruptcy Board of India (IBBI) is expected to set in motion a chain of events at many firms, including well-known consultancies that are eyeing the huge market for stressed assets and debt resolution.
- Entities will have to form a separate subsidiary with dedicated resources related to insolvency.
- Practitioners in the segment say that the order has made it clear that IBBI is not going to grant registration to individuals in such a scenario and so entities that want to be registered will have to form a separate subsidiary with dedicated resources related to insolvency and bankruptcy work.

Basic Information:

- The Insolvency and Bankruptcy Board of India (IBBI) is the regulator for overseeing insolvency proceedings and entities like Insolvency Professional Agencies (IPA), Insolvency Professionals (IP) and Information Utilities (IU) in India.
- It was established on 1 October 2016 and given statutory powers through the Insolvency and Bankruptcy Code, which was passed by Lok Sabha on 5 May 2016.
- It covers Individuals, Companies, Limited Liability Partnerships and Partnership firms. The new code will speed up the resolution process for stressed assets in the country.
- It attempts to simplify the process of insolvency and bankruptcy proceedings. It handles the cases using two tribunals like NCLT(National company law tribunal) and Debt recovery tribunal.

3. Govt okays Rs 1,100 crore capital infusion in Indian Overseas Bank

<http://economictimes.indiatimes.com/industry/banking/finance/banking/govt-okays-rs-1100-crore-capital-infusion-in-iob/articleshow/57779199.cms>

What's in news ?

- Chennai-based state lender Indian Overseas Bank will get Rs 1,100 crore as "turnaround-linked capital" infusion from the government.
- The government has approved the second tranche of capital infusion in public sector banks to enhance their capital base.

- The first tranche was announced in July with the objective of enhancing their lending operations and enabling them to raise more money from the market.

Additional Info :

- The capital requirement of Indian banks would cross the Rs 5 lakh-crore mark while meeting the global Basel III banking norms by March 2019.
- Given the credit growth expected in the short-to-medium term, the capital requirement of Indian banks would cross a huge level of Rs 5 lakh crore while meeting the globally mandatory Basel III banking norms by March 31, 2019.
- On the other hand, banks in the public sector may find it very challenging to meet the Basel III requirements as a big chunk of funds is required to be inducted by the central government, which owns a majority stake in them.

Basel III banking norms :

What is 'Basel III'

- Basel III is an international regulatory accord that introduced a set of reforms designed to improve the regulation, supervision and risk management within the banking sector.
- The Basel Committee on Banking Supervision published the first version of Basel III in late 2009, giving banks approximately three years to satisfy all requirements.
- Largely in response to the credit crisis, banks are required to maintain proper leverage ratios and meet certain minimum capital requirements.

BREAKING DOWN 'Basel III'

- Basel III is part of the continuous effort to enhance the banking regulatory framework.
- It builds on the Basel I and Basel II documents, and seeks to improve the banking sector's ability to deal with financial stress, improve risk management, and strengthen the banks' transparency.
- A focus of Basel III is to foster greater resilience at the individual bank level in order to reduce the risk of system-wide shocks.

Minimum Capital Requirements

- Basel III introduced tighter capital requirements in comparison to Basel I and Basel II.
- Banks' regulatory capital is divided into Tier 1 and Tier 2, while Tier 1 is subdivided into Common Equity Tier 1 and additional Tier 1 capital.
- The distinction is important because security instruments included in Tier 1 capital have the highest level of subordination.

- Common Equity Tier 1 capital includes equity instruments that have discretionary dividends and no maturity, while additional Tier 1 capital comprises securities that are subordinated to most subordinated debt, have no maturity, and their dividends can be cancelled at any time. Tier 2 capital consists of unsecured subordinated debt with an original maturity of at least five years.

4. MSME classification may soon be based on employment, turnover

<http://www.thehindubusinessline.com/todays-paper/tp-news/msme-classification-may-soon-be-based-on-employment-turnover/article9596632.ece>

Key Points :

- Small, micro sector form the backbone of job creation.
- The government is looking beyond the criterion of capital employed to better define MSME sector for growth.
- The conventional definition of micro, small and medium enterprises is based on different slabs of investments ranging from Rs. 10 lakh to over Rs. 5 crore.
- However, with MSMEs constituting the backbone of employment generation, the government plans to include parameters such as employment generation and turnover in defining the sector.
- The role of MSMEs in employment generation is being increasingly recognised. It is second only to agriculture in generating jobs.

WTO angle :

- In the WTO, for instance, developed countries are keen on bringing in a MSE forum in the context of the potential of the sector for job generation. While this is a welcome step, India is concerned on the possibility of labour issues becoming a non tariff barrier to markets.
- India is not in favour of a MSE forum in the WTO because of concerns over labour issues.

Challenges faced by MSMSE Sector :

- The major challenges facing the sector are credit flow, technology development, skilled human resource, regulatory compliance and affirmative action. The US can help Indian MSMEs in all these issues.
- India can be a cost effective base for US MSME production emulating the automobile sector. An Indo-US forum for MSMEs would benefit mutual cooperation.

- India's public procurement order reserving 20 per cent for MSME sector is a part of affirmative action. The US has a well established system.
- With the shift to GST around the corner, compliance cost is a major concern of the MSMEs as it does not distinguish between large and small companies.

Present MSME Classification :

Nature of activity of the Enterprise	Investment in plant and machinery excluding land and building for enterprises engaged in manufacturing or production, processing or preservation of goods	Investment in equipment excluding land and building for enterprises engaged in providing or rendering of services (loans up to Rs 1 crore)
Micro	Not exceeding Rs.25.00 Lakhs	Not exceeding Rs.10.00 Lakhs
Small	More than Rs.25.00 lakhs but does not exceed Rs.500.00 lakhs	More than Rs.10.00 lakhs but does not exceed Rs.200.00 lakhs
Medium	More than Rs.500.00 lakhs but does not exceed Rs.1000.00 lakhs	More than Rs.200.00 lakhs but does not exceed Rs.500.00 lakhs

SCHEMES IN NEWS

- **The National Food Security Act, 2013 (also Right to Food Act):**

- ✓ Act of the Parliament of India which aims to provide subsidized food grains to approximately two thirds of India's 1.2 billion people.
- ✓ The National Food Security Act, 2013 (NFSA 2013) converts into **legal entitlements** for existing food security programmes of the Government of India- the Midday Meal Scheme, Integrated Child Development Services scheme and the Public Distribution System.
- ✓ NFSA 2013 recognizes **maternity entitlements**.
- ✓ The Midday Meal Scheme and the Integrated Child Development Services Scheme are **universal** in nature whereas **the PDS will reach about two-thirds of the population (75% in rural areas and 50% in urban areas)**.
- ✓ Under the provisions of the bill, beneficiaries of the Public Distribution System (or, PDS) are entitled to 5 kilograms per person per month of cereals at the following prices:

Rice at ₹3 per kg

Wheat at ₹2 per kg

Coarse grains (millet) at ₹1 per kg.

- ✓ However, since **Antyodaya Anna Yojana (AAY) households** constitute poorest of the poor, and are presently entitled to 35 kg per household per month, entitlement of existing AAY households will be protected at 35 kg per household per month.
- ✓ Pregnant women, lactating mothers, and certain categories of children are eligible for daily free cereals.
- ✓ **Nutritional Support to women and children** : Pregnant women and lactating mothers and children in the age group of 6 months to 14 years will be entitled to meals as per prescribed nutritional norms under Integrated Child Development Services (ICDS) and Mid-Day Meal (MDM) schemes. Higher nutritional norms have been prescribed for malnourished children upto 6 years of age.
- ✓ **Maternity Benefit** : Pregnant women and lactating mothers will also be entitled to receive maternity benefit of not less than Rs. 6,000.
- ✓ **Women Empowerment** : Eldest woman of the household of age 18 years or above to be the head of the household for the purpose of issuing of ration cards.
- ✓ **Grievance Redressal Mechanism** : Grievance redressal mechanism at the District and State levels. States will have the flexibility to use the existing machinery or set up separate mechanism.
- ✓ **Transparency and Accountability** : Provisions have been made for disclosure of records relating to PDS, social audits and setting up of Vigilance Committees in order to ensure transparency and accountability.

- ✓ Food Security Allowance : Provision for food security allowance to entitled beneficiaries in case of non-supply of entitled foodgrains or meals.
- ✓ Penalty : Provision for penalty on public servant or authority, to be imposed by the State Food Commission, in case of failure to comply with the relief recommended by the District Grievance Redressal Officer.

ARTICLES IN NEWS:

Article 324: Superintendence, direction and control of elections to be vested in an Election Commission

(1) The superintendence, direction and control of the preparation of the electoral rolls for, and the conduct of, all elections to Parliament and to the Legislature of every State and of elections to the offices of President and Vice President held under this Constitution shall be vested in a Commission (referred to in this Constitution as the Election Commission)

(2) The Election Commission shall consist of the Chief Election Commissioner and such number of other Election Commissioners, if any, as the President may from time to time fix and the appointment of the Chief Election Commissioner and other Election Commissioners shall, subject to the provisions of any law made in that behalf by Parliament, be made by the President

(3) When any other Election Commissioner is so appointed the Chief Election Commissioner shall act as the Chairman of the Election Commission

(4) Before each general election to the House of the People and to the Legislative Assembly of each State, and before the first general election and thereafter before each biennial election to the Legislative Council of each State having such Council, the President may also appoint after consultation with the Election Commission such Regional Commissioners as he may consider necessary to assist the Election Commission in the performance of the functions conferred on the Commission by clause (1)

(5) Subject to the provisions of any law made by Parliament, the conditions of service and tenure of office of the Election Commissioners and the Regional Commissioners shall be such as the President may by rule determine; Provided that the Chief Election Commissioner shall not be removed from his office except in like manner and on the like grounds as a Judge of the Supreme Court and the conditions of service of the Chief Election Commissioner shall not be varied to his disadvantage after his appointment: Provided further that any other Election Commissioner or a Regional Commissioner shall not be removed from office except on the recommendation of the Chief Election Commissioner

(6) The President, or the Governor of a State, shall, when so requested by the Election Commission, make available to the Election Commission or to a Regional Commissioner such staff as may be necessary for the discharge of the functions conferred on the Election Commission by clause (1)

Article 19. Protection of certain rights regarding freedom of speech etc

(1) All citizens shall have the right

(a) to freedom of speech and expression;

(b) to assemble peaceably and without arms;

(c) to form associations or unions;

(d) to move freely throughout the territory of India;

(e) to reside and settle in any part of the territory of India; and

(f) omitted

(g) to practise any profession, or to carry on any occupation, trade or business

(2) Nothing in sub clause (a) of clause (1) shall affect the operation of any existing law, or prevent the State from making any law, in so far as such law imposes reasonable restrictions on the exercise of the right conferred by the said sub clause in the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement to an offence

(3) Nothing in sub clause (b) of the said clause shall affect the operation of any existing law in so far as it imposes, or prevent the State from making any law imposing, in the interests of the sovereignty and integrity of India or public order, reasonable restrictions on the exercise of the right conferred by the said sub clause

(4) Nothing in sub clause (c) of the said clause shall affect the operation of any existing law in so far as it imposes, or prevent the State from making any law imposing, in the interests of the sovereignty and integrity of India or public order or morality, reasonable restrictions on the exercise of the right conferred by the said sub clause

(5) Nothing in sub clauses (d) and (e) of the said clause shall affect the operation of any existing law in so far as it imposes, or prevent the State from making any law imposing, reasonable restrictions on the exercise of any of the rights conferred by the

said sub clauses either in the interests of the general public or for the protection of the interests of any Scheduled Tribe

(6) Nothing in sub clause (g) of the said clause shall affect the operation of any existing law in so far as it imposes, or prevent the State from making any law imposing, in the interests of the general public, reasonable restrictions on the exercise of the right conferred by the said sub clause, and, in particular, nothing in the said sub clause shall affect the operation of any existing law in so far as it relates to, or prevent the State from making any law relating to,

(i) the professional or technical qualifications necessary for practising any profession or carrying on any occupation, trade or business, or

(ii) the carrying on by the State, or by a corporation owned or controlled by the State, of any trade, business, industry or service, whether to the exclusion, complete or partial, of citizens or otherwise.

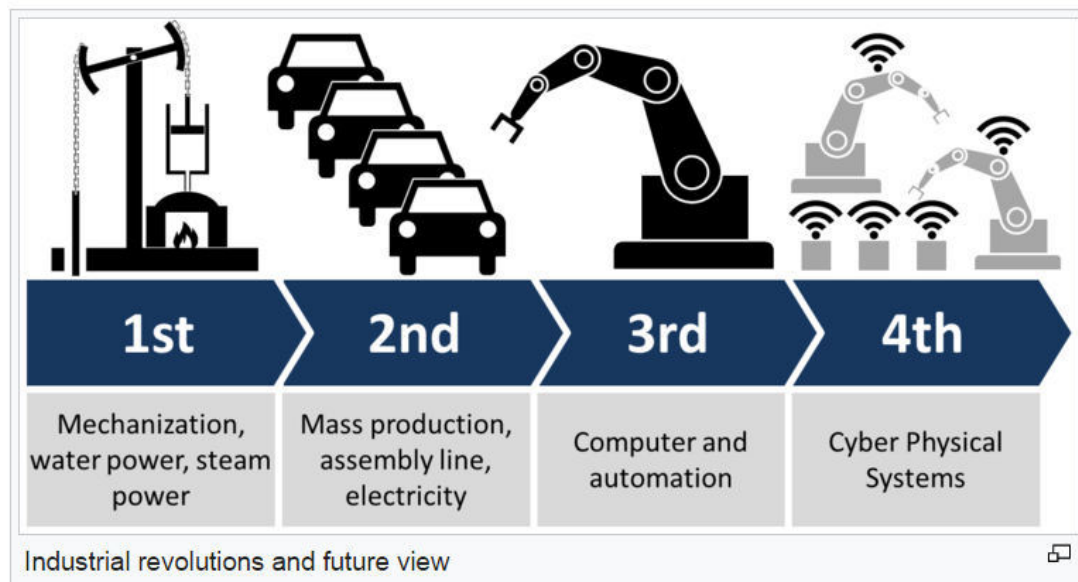
Article 21. Protection of life and personal liberty No person shall be deprived of his life or personal liberty except according to procedure established by law.

TERMS IN NEWS

1. **Pachyderm** –Pachyderm may refer to any of the Pachydermata, an obsolete 19th-century taxonomic order of mammals which included elephants, rhinoceroses and hippopotamuses.
2. **Tax Evasion:** Tax evasion is an illegal practice where a person, organization or corporation intentionally avoids paying his true tax liability (illegal on payment as well as illegal under payment). Those caught evading taxes are generally subject to criminal charges and substantial penalties
3. **Tax Avoidance:** Tax avoidance is the use of legal methods to modify an individual's financial situation to lower the amount of income tax owed. This is generally accomplished by claiming the permissible deductions and credits. This practice differs from tax evasion, which uses illegal methods, such as underreporting income to avoid paying taxes.
4. **Social Audit:** Social audit is a process of reviewing official records and determining whether state reported expenditures reflect the actual money spent on the ground.
5. **Industry 4.0:** Industry 4.0 is the current trend of automation and data exchange in manufacturing technologies. It includes cyber-physical systems (A

cyber-physical system (CPS) is a mechanism controlled or monitored by computer-based algorithms, tightly integrated with the internet and its users.), the Internet of things and cloud computing.

Industry 4.0 creates what has been called a "smart factory". Within the modular structured smart factories, cyber-physical systems monitor physical processes, create a virtual copy of the physical world and make decentralized decisions. Over the Internet of Things, cyber-physical systems communicate and cooperate with each other and with humans in real time, and via the Internet of Services, both internal and cross-organizational services are offered and used by participants of the value chain.



6. Insolvency and Bankruptcy Code:

- ✓ The Insolvency and Bankruptcy Code, 2016 (IBC) is the bankruptcy law of India which seeks to consolidate the existing framework by creating a single law for insolvency and bankruptcy.
- ✓ **Insolvency Resolution :** The Code outlines separate insolvency resolution processes for individuals, companies and partnership firms. The process may be initiated by either the debtor or the creditors. A maximum time limit, for completion of the insolvency resolution process, has been set for corporates and individuals. For companies, the process will have to be completed in 180 days, which may be extended by 90 days, if a majority of the creditors agree.
- ✓ **Insolvency regulator:** The Code establishes the Insolvency and Bankruptcy Board of India, to oversee the insolvency proceedings in the country and regulate the entities registered under it. The Board will have 10 members, including representatives from the Ministries of Finance and Law, and the Reserve Bank of India

- ✓ **Insolvency professionals:** The insolvency process will be managed by licensed professionals. These professionals will also control the assets of the debtor during the insolvency process.
- ✓ **Bankruptcy and Insolvency Adjudicator:** The Code proposes two separate tribunals to oversee the process of insolvency resolution, for individuals and companies: (i) the National Company Law Tribunal for Companies and Limited Liability Partnership firms; and (ii) the Debt Recovery Tribunal for individuals and partnerships.

Practice question:

1. Which among the following is / are dwarf planets

1. Ceres
2. Pluto
3. Makemake
4. Haumea.

Choose the correct answer

- A. 1 and 2
- B. 2 and 4
- C. 1, 2 and 3
- D. All are correct

Correct Answers: D

Topic: Current Affairs

Level: Moderate

Explanation: Dwarf Planets: A dwarf planet is an object in orbit around the Sun that is large enough (massive enough) to have its own gravity pull itself into a round (or nearly round) shape. Generally, a dwarf planet is smaller than Mercury. A dwarf planet may also orbit in a zone that has many other objects in it. For example, an orbit within the asteroid belt is in a zone with lots of other objects.

At present there are five dwarf planets- Ceres, Pluto, Eris, Makemake and Haumea.

2. A new digital payments app called “BHIM”, was recently launched. In this context, consider the following statements:

1. Users can send money to people who don't have the app.
2. The app is based on the United Payments Interface.

3. It will support Aadhaar-based payments.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 Only
- C. 1 and 3 Only
- D. 1 , 2 and 3

Correct Answers: C

Topic: Current Affairs

Level: Moderate

Explanation:

- ✓ Bharat Interface for Money or BHIM is a digital payments solution app based on Unified Payments Interface (UPI) from the National Payments Corporation of India (NPCI). If you have signed up for UPI based payments on your respective bank account, which is also linked to your mobile number, then you'll be able to use the BHIM app to conduct digital transactions.
- ✓ BHIM is also supposed to support Aadhaar-based payments, where transactions will be possible just with a fingerprint impression, but that facility is yet to roll out.
- ✓ BHIM app is not a mobile wallet. In case of mobile wallets like Paytm or MobiKwik you store a limited amount of money on the app, that can only be sent to someone who is using the same wallet. Your friend, relative or even a merchant who you're trying to pay doesn't necessarily need to be on the BHIM app. All they need is a bank account to receive the payment. (BHIM also has options to transfer via IFSC, MMID as well for non-UPI banks).

3. Recently Basel III norms was in news. They are related to which of the following?

- a. Norms regarding free and fair international trade
- b. Norms regarding stricter regulation of intellectual property rights
- c. Norms to improve the regulation, supervision and risk management within the banking sector.
- d. None

Answer : C

Topic : Economy

Type : Factual

Difficulty : Medium

Explanation:

Basel III is an international regulatory accord that introduced a set of reforms designed to improve the regulation, supervision and risk management within the banking sector. The Basel Committee on Banking Supervision published the first version of Basel III in late 2009, giving banks approximately three years to satisfy all requirements. Largely in response to the credit crisis, banks are required to maintain proper leverage ratios and meet certain minimum capital requirements.

4. Consider the statements about classification MSME sector.

1. In manufacturing, investments not exceeding Rs.25.00 Lakhs are considered as small enterprise.
2. In services, investments not exceeding Rs.10.00 Lakhs are considered as small enterprise.

Which of the above statements is/are correct ?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Answer : D

Topic : Economy

Type : Factual

Difficulty : Medium

Both are definitions of micro enterprise.

G.S. Paper -1

1. Mega cultural event inaugurated in Tawang

<http://indiatoday.intoday.in/story/mega-cultural-event-inaugurated-in-tawang/1/911299.html>

What's in news?

- A nine-day mega social occasion **Rashtriya Sanskriti Mahotsava** exhibiting traditional folk dance and music was introduced in Tawang
- It involves pride for Tawang and Arunachal Pradesh that a major social occasion is being held here. Regardless of rehashed claims by a neighboring nation, Arunachal Pradesh is more Indian than whatever other piece of the nation.
- About 100 specialists speaking to various tribes of Arunachal Pradesh and 500 craftsmen from the nation over will exhibit their conventional society move and music at the social event, sorted out by the Union Ministry of Culture.

G.S. Paper -2

Topic: International relations (Indian Diaspora)

1. No pay, 500 Indians suffer in Bahrain

<http://www.thehindu.com/news/national/no-pay-500-indians-suffer-in-bahrain/article17621271.ece>

- Continuing the pattern of troubles confronted by workers from India in Gulf nations.
- A vast number of Indian specialists in Bahrain have looked for the support of the Ministry of External Affairs.
- The issue became visible when a gathering of workers utilized with a Bahraini privately owned business spoke to the legislature for help through web-based social networking systems. They said no less than 500 laborers had not gotten compensation for a considerable length of time and were living on sustenance gifts.
- The cases from Bahrain and Saudi Arabia are the most recent in a progression of occurrences including countless laborers from the Gulf Cooperation Council (GCC) nations.
- The GCC nations represent the biggest number of abroad Indian specialists and remain a consistent wellspring of remote settlements to the Indian economy.
- Indian External Affairs serve has taught the Indian Embassy at Bahrain for rapid determination of the case.



2. Nagaland MLAs express serious concern over border fencing

<http://indiatoday.intoday.in/story/nagaland-mlas-express-serious-concern-over-border-fencing/1/911360.html>

What's in news?

- Kohima, Nagaland Assembly communicated genuine worry over the announced development of fencing on the universal fringe by Myanmar at Pangsha in Tuensang locale of Nagaland.
- Fencing of the Indo-Myanmar fringe can possibly influence free development and the conventional social and financial ties between the general population on both sides of the outskirt.
- Naga individuals don't have any issue with the nonexistent line separating India and Myanmar, yet development of outskirt fencing is not worthy.
- Construction of fringe fencing in Pangsha is an immediate infringement of Article 371 (A) in light of the fact that both the Indian and Myanmar government have neglected to counsel and accept the authentic land proprietors (Nagas) in such manner as land and its assets had a place with the land proprietors to the extent the arrangement of Article 371 (A) is concerned.

3. U.S. lawmakers urge India to lift curbs on NGO

<http://www.thehindu.com/news/international/us-lawmakers-urge-india-to-lift-curbs-on-ngo/article17620581.ece>

What's in news?

- A gathering of 107 individuals from U.S. Congress have kept in touch with Union Home Minister to incidentally lift the limitations on the American Christian philanthropy, **Compassion International** (CI).
- Background data: The Union government has requested banks in India to quit preparing wire exchanges from CI to its Indian accomplices, conveying the philanthropy's operations to end. CI underpins 1,45,000 kids in India with gifts brought up in the U.S.
- The Indian government has put CI on a Priority Watch list, blaming the philanthropy for doing religious change in the nation. Notwithstanding, no body of evidence has been recorded against the association.
- The U.S legislators said they were "long time supporters of U.S. -India association" however the Indian government's treatment of CI has "brought on genuine worry inside the U.S. Congress."
- Accused India - absence of straightforwardness and consistency in your administration's authorization of the **Foreign Contributions Regulations Act**.

Topic: Issue related to health

4. Rajasthan's move to provide therapeutic food helps tackle malnutrition

<http://www.thehindu.com/todays-paper/tp-national/rajasthans-move-to-provide-therapeutic-food-helps-tackle-malnutrition/article17626206.ece>

What's in news?

- The State government's turn to give vitamin-improved and prepared to-utilize helpful sustenance to malnourished kids has borne organic product, with countless now having sound existences.
- The Community-based Management of Acute Malnutrition (CMAM)—a venture attempted by the legislature in December 2015—has helped in treating 9,117 youngsters beneath 5 years who were experiencing serious intense ailing health (SAM). UNICEF, Global Alliance for Improved Nutrition, and Action Against Hunger are the venture accomplices.

Basic Information

Therapeutic food: Therapeutic food is sustenance's intended for particular, normally healthful, remedial purposes as a type of dietary supplement. The essential cases of remedial sustenance are utilized for crisis sustaining of malnourished kids or to supplement the eating methodologies of people with extraordinary nourishment prerequisites, for example, the elderly.

G.S. Paper -3

Topic: Intellectual Property Rights

1. Ancient knowledge hub faces grim future

<http://www.thehindu.com/news/national/no-committed-funds-for-csir-library-on-ayurveda-yoga-and-unani/article17621132.ece>

What's in news?

- The Traditional Knowledge Database Library (TKDL), association of the Council of Scientific and Industrial Research that has battled **biopiracy** for a considerable length of time, will stop to exist in its flow shape.
- It will never again be an association that once star effectively scouted for licensed innovation encroachments by Indian and remote organizations on conventional information in zones.
- TKDL is an online vault of around 300,000 details from Ayurveda, Siddha and Unani frameworks. The body deciphered, filtered and digitized writings from their Sanskrit, Arabic and Urdu firsts. This was then made searchable, permitting patent workplaces in India, Europe, the United States, United Kingdom, Canada, Australia and Japan to check if patent candidates of natural blends, creams and medications were constructing their cases with respect to accessible conventional learning.

- Between 2009 and 2015, 219 licenses were denied to Indian and outside organizations in light of TKDL's difficulties.
- The association was found in pharmaceutical circles as a "patent blocker," subsequently there was campaigning against it.
- Now TKDL is confronting cuts in budgetary distributions

Topic: Economy

2. Fin min, bankers to meet on utilising excess liquidity

http://www.business-standard.com/article/pti-stories/finmin-bankers-to-meet-on-utilising-excess-liquidity-117032301016_1.html

What's in news?

- The Finance Ministry to meet bankers to talk about ways to empty surplus liquidity out of the managing an account framework emerging out of the Center's demonetisation move.
- The new Standing Deposit Facility permits banks to stop their overabundance stores with the RBI at a rate which is lower than the repo rate yet with no security.
- The repo rate is 6.25%. At present, banks can get finances through the repo window from the RBI by utilizing government securities as guarantee.

3. GST will make exports competitive, says Nirmala Sitharaman

<http://www.thehindu.com/business/Economy/gst-will-make-exports-more-competitive-nirmala-sitharaman/article17608510.ece>

- ✓ GST gives an inclination that market in India is one now and there are no hindrances between districts or areas. Indeed, even inside the nation, the esteem chains — which will get coordinated — will have an easier and direct stream (of merchandise) and consequently, it ought to make trades more aggressive instead of costly

Miscellaneous:

▪ The World Bank –Report on “Doing Business”

- ✓ Compares the business controls crosswise over 190 economies.
- ✓ As per the report distributed by the World Bank in September 2016, India's general positioning enhanced from 131 in 2016 to 130 in 2017.
- ✓ The general positioning is a normal of the different sub-pointers on the premise of which the nations have been positioned. These sub-markers incorporate the time taken to begin a business, time taken to get development grants, paying charges and authorizing contracts.

Acts in news:

▪ **Foreign Contribution (regulation) Act, 2010:**

- ✓ **Aim :** To regulate the acceptance and utilization of foreign contribution or foreign hospitality by certain individuals or associations or companies and to prohibit acceptance and utilization of foreign contribution or foreign hospitality for any activities detrimental to the national interest and for matters connected therewith or incidental thereto.

Articles in news:

Article 371A. Special provision with respect to the State of Nagaland

- (1) Notwithstanding anything in this Constitution,
 - (a) no Act of Parliament in respect of
 - (i) religious or social practices of the Nagas,
 - (ii) Naga customary law and procedure,
 - (iii) administration of civil and criminal justice involving decisions according to Naga customary law,
 - (iv) ownership and transfer of land and its resources, shall apply to the State of Nagaland unless the Legislative Assembly of Nagaland by a resolution so decides;
 - (b) the Governor of Nagaland shall have special responsibility with respect to law and order in the State of Nagaland for so long as in his opinion internal disturbances occurring in the Naga Hills Tuensang Area immediately before the formation of that State continue therein or in any part thereof and in the discharge of his functions in relation thereto the Governor shall, after consulting the Council of Ministers, exercise his individual judgment as to the action to be taken: Provided that if any question arises whether any matter is or is not a matter as respects which the Governor is under this sub clause required to act in the exercise of his individual judgment, the decision of the Governor in his discretion shall be final, and the validity of anything done by the Governor shall not be called in question on the ground that he ought or ought not to have acted in the exercise of his individual judgment: Provided further that if the President on receipt of a report from the Governor or otherwise is satisfied that it is no longer necessary for the Governor to have special responsibility with respect to law and order in the State of Nagaland, he may by order direct that the Governor shall cease to have such responsibility with effect from such date as may be specified in the order;
 - (c) in making his recommendation with respect to any demand for a grant, the Governor of Nagaland shall ensure that any money provided by the Government of India out of the Consolidated Fund of India for any

specific service or purpose is included in the demand for a grant relating to that service or purpose and not in any other demand;

(d) as from such date as the Governor of Nagaland may by public notification in this behalf specify, there shall be established a regional council for the Tuensang district consisting of thirty five members and the Governor shall in his discretion make rules providing for

(i) the composition of the regional council and the manner in which the members of the regional council shall be chosen: Provided that the Deputy Commissioner of the Tuensang district shall be the Chairman ex officio of the regional council and the Vice Chairman of the regional council shall be elected by the members thereof from amongst themselves;

(ii) the qualifications for being chosen as, and for being, members of the regional council;

(iii) the term of office of, and the salaries and allowances, if any, to be paid to members of, the regional council;

(iv) the procedure and conduct of business of the regional council;

(v) the appointment of officers and staff of the regional council and their conditions of services; and

(vi) any other matter in respect of which it is necessary to make rules for the constitution and proper functioning of the regional council

(2) Notwithstanding anything in this Constitution, for a period of ten years from the date of the formation of the State of Nagaland or for such further period as the Governor may, on the recommendation of the regional council, by public notification specify in this behalf,

(a) the administration of the Tuensang district shall be carried on by the Governor;

(b) where any money is provided by the Government of India to the Government of Nagaland to meet the requirements of the State of Nagaland as a whole, the Governor shall in his discretion arrange for an equitable allocation of that money between the Tuensang district and the rest of the State;

(c) no Act of the Legislature of Nagaland shall apply to the Tuensang district unless the Governor, on the recommendation of the regional council, by public notification so directs and the Governor in giving such direction with respect to any such Act may direct that the Act shall in its application to the Tuensang district or any part thereof have effect subject to such exceptions or modifications as the Governor may specify on the recommendation of the regional council: Provided that any direction given under this sub clause may be given so as to have retrospective effect;

(d) the Governor may make regulations for the peace, progress and good government of the Tuensang district and any regulations so made may

repeal or amend with retrospective effect, if necessary, any Act of Parliament or any other law which is for the time being applicable to that district;

(e)

(i) one of the members representing the Tuensang district in the Legislative Assembly of Nagaland shall be appointed Minister for Tuensang affairs by the Governor on the advice of the Chief Minister and the Chief Minister in tendering his advice shall act on the recommendation of the majority of the members as aforesaid;

(ii) the Minister for Tuensang affairs shall deal with, and have direct access to the Governor on, all matters relating to the Tuensang district but he shall keep the Chief Minister informed about the same;

(f) notwithstanding anything in the foregoing provisions of this clause, the final decision on all matters relating to the Tuensang district shall be made by the Governor in his discretion;

(g) in articles 54 and 55 and clause (4) of Article 80, references to the elected members of the Legislative Assembly of a State or to each such member shall include references to the members or member of the Legislative Assembly of Nagaland elected by the regional council established under this article;

(h) in Article 170

(i) clause (1) shall, in relation to the Legislative Assembly of Nagaland, have effect as if for the word sixty, the words forty six had been substituted;

(ii) in the said clause, the reference to direct election from territorial constituencies in the State shall include election by the members of the regional council established under this article;

(iii) in clauses (2) and (3), references to territorial constituencies shall mean references to territorial constituencies in the Kohima and Mokokchung districts

Practice questions:

1. Consider the following statement with reference to Rashtriya Sanskriti Mahotsava

- A. Held at Arunachal Pradesh
- B. Main aim is to promote traditional folkdance and music

Choose the correct answer

- 1. Only A
- 2. Only B
- 3. Both A and B
- 4. Neither A nor B

Correct Answer: 3

Topic: Current Affair

Level: moderate

Explanation: A nine-day mega social occasion **Rashtriya Sanskriti Mahotsava** exhibiting traditional folk dance and music was introduced in Tawang

2. Which ministry is responsible for implementation of Foreign Contribution of Regulation Act

- A. Ministry of Finance
- B. Ministry of Home affairs
- C. Ministry of Corporate affairs
- D. None of the above.

Correct Answer: B

Topic: Current Affair

Level: moderate

Explanation: "US based NGOs are financing the protests KundanKullam Nuke Power Plant.".So **Home ministry** got in action, bank accounts of some NGOs were frozen after it was found that they were diverting money received from their donors abroad into funding protests at the Koodankulam plant.

3. Doha Development Round is often in news. It relates to which of the following ?

- a) Talks regarding international monetary system
- b) Talks regarding refugee crisis
- c) Talks at WTO regarding world trade
- d) None

Answer : C

Topic : Economy

Level : Medium

Type : Factual

Explanation :

The World Trade Organization (WTO) is an intergovernmental organization which regulates international trade.

The WTO is attempting to complete negotiations on the Doha Development Round, which was launched in 2001 with an explicit focus on developing countries. As of June 2012, the future of the Doha Round remained uncertain: the work programme lists 21

subjects in which the original deadline of 1 January 2005 was missed, and the round is still incomplete. The conflict between free trade on industrial goods and services but retention of protectionism on farm subsidies to domestic agricultural sector (requested by developed countries) and the substantiation of fair trade on agricultural products (requested by developing countries) remain the major obstacles. This impasse has made it impossible to launch new WTO negotiations beyond the Doha Development Round. As a result, there have been an increasing number of bilateral free trade agreements between governments. As of July 2012, there were various negotiation groups in the WTO system for the current agricultural trade negotiation which is in the condition of stalemate.

4. Consider the statements :

1. Goods and Services Tax Network (GSTN) is a for-profit organisation formed to create a platform for all the concerned parties.
2. The portal will be accessible to the central government which will track down every transaction on its end.

Which of the following statements is/are correct ?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Answer : B

Topic : Economy

Level : Medium

Type : Factual

Explanation :

Goods and Services Tax Network (GSTN) is a **nonprofit** organisation formed to create a platform for all the concerned parties i.e. stakeholders, government, taxpayers to collaborate on a single portal. The portal will be accessible to the central government which will track down every transaction on its end while the taxpayers will be having a vast service to return file their taxes and maintain the details.

G.S. Paper -2

Topic: Polity

1. Law Commission asks govt. to fortify democracy from hate speech

<http://www.thehindu.com/news/national/law-commission-asks-govt-to-fortify-democracy-from-hate-speech/article17655039.ece>

What's in news?

- The Supreme Court in 2014 had alluded to the Law Commission for intends to arm the Election Commission to take action against abhor discourse.
- The Law Commission of India-267th -Report threat of abhor discourse
- Hate Speech can possibly incite people and society to confer demonstrations of psychological warfare, genocides and ethnic purifying.
- It is a "prompting to scorn" against a specific gathering of people underestimated by their religious conviction, sexual introduction, sex, and so forth.
- The best law consultative body to the administration encouraged the development of the correctional law. It drafted another law — The Criminal Law (Amendment) Bill, 2017 — embedding new Sections to invigorate majority rules system against loathe talks.
- Section 153C-punishes instigation to disdain and rebuffs a blameworthy individual with two years' detainment or ₹5,000 in fine or both
- Section 505A-interestingly makes 'bringing about dread, caution, or incitement of savagery in specific cases' a particular criminal offense and discipline of one year detainment or ₹5,000 in fine or both.
- In the period of innovation, the namelessness of Internet permits a blackguard to effectively spread false and hostile thoughts.
- Indisputably, hostile discourse has genuine and pulverizing impacts on individuals' lives and dangers their wellbeing and security. It is unsafe and divisive for groups and hampers social advance. In the event that left unchecked, despise discourse can extremely influence appropriate to life of each person
- Incitement to viciousness can't be the sole test for deciding if a discourse adds up to abhor discourse or not. Indeed, even discourse that does not impel brutality has the capability of minimizing a specific segment of the general public or person

What is Hate Speech?

- Hate Speech is any word composed or talked signs, unmistakable portrayals inside the hearing or sight of a man with the goal to bring about dread or alert, or prompting to savagery.

2. Bill to decriminalize suicide tabled in LS

<http://epaperbeta.timesofindia.com/Article.aspx?eid=31806&articlexml=Bill-to-decriminalise-suicide-tabled-in-LS-25032017015017>

What's in news?

- The Mental Health Care Bill, 2013, went for decriminalizing endeavored suicide and characterizing dysfunctional behavior in a more extensive and more comprehensive way, was tabled in the Lok Sabha.
- Bill perceives suicide endeavors as a weep for offer assistance.
- Bill bans the utilization of shock treatment for kids with dysfunctional behavior.
- **Remarkable arrangement of advance directives:** The bill permits individuals to pick somebody who can deal with them or technique for treatment in the event that they endure emotional sickness in future.
- Bill repeals Section 309 of the IPC which accommodated year-long detainment for a fizzled suicide offer.

Topic: Health

3. Drug-resistant TB a concern

<http://www.thehindu.com/news/national/drug-resistant-tb-a-concern/article17654956.ece>

Key facts:

- The tuberculosis scourge influences 28 lakh Indians;
- 79,000 individuals experience the ill effects of sort of TB impervious to generally anti-infection agents.
- India has gone under feedback from the worldwide general wellbeing group for giving off base appraisals of the tuberculosis load in the vicinity of 2000 and 2015.
- A driving master on TB called 'India's Tuberculosis emergency's as "Ebola with wings."
- Public wellbeing specialists keep up that the unchecked ascent of multidrug-resistant tuberculosis (MDR TB) in India will debilitate the advance made comprehensively
- 1 in each 5 instances of TB patient experience the ill effects of essential resistance TB
- The two new WHO suggested drugs for DR TB, Delaminid and Bedaquiline, are not right now accessible in Indian national TB program.
- Bedaquiline is accessible at just 6 States in the nation. Individuals living with MDR and XDR-TB are not getting sufficient treatment in India. One medication is not enrolled by any stretch of the imagination. The other one is accessible just in 6 States and very frequently beyond words they can get to the prescription

4. Two thirds of cancers caused by random genetic mistakes: U.S. study

<http://www.reuters.com/article/us-health-cancer-random-idUSKBN16U2JH>

What's in news?

- About 66% of malignancies are brought on by arbitrary typos(error) in DNA that happen as typical cells make duplicates of themselves, a finding that clarifies why solid people who do all that they can to maintain a strategic distance from tumor are as yet hit with the ailment U.S specialists discoveries.
- The new discoveries depend on hereditary sequencing and growth studies from 69 nations around the globe.
- Random DNA botches represented significantly a greater amount of the danger of creating malignancy than already suspected. The finding created an objection from malignancy specialists, who have generally held that most diseases were brought about by preventable way of life and ecological elements or acquired hereditary imperfections.
- Although a great many people think about the genetic and ecological reasons for growth, for example, smoking, few welcome the hazard from irregular mix-ups that happen each time a typical cell partitions and duplicates its DNA into two new cells.
- 66 percent of changes in these malignancies came about because of replicating blunders, 29 percent were created by way of life and natural components, and the rest of the 5 percent were acquired.
- Although the greater part of these changes can't be kept, the group focused on that early recognition and treatment can avert numerous malignancy passings, paying little respect to the cause.

Topic: Statutory, Regulatory bodies.

5. Environment Ministry official to chair animal welfare board

<http://www.thehindu.com/news/national/environment-ministry-official-to-chair-animal-welfare-board/article17656782.ece>

What's in news?

- The Animal Welfare Board of India (AWBI), a statutory counseling body under the Union Ministry of Environment, Forests and Climate Change (MoEF), will now be forever led by a senior MoEF official.
- Previously association has dependably been led by some individual outside government, for example, veterinarians, creature welfare activists or resigned judges.
- This is the first occasion when that an administration authority is leading the body and demonstrates that the Center needs to guarantee its diktats are actualized.

- Differences between the AWBI and the MoEF, particularly on the lead of the jallikattu, which conveyed Chennai to a stop not long ago, was a key purpose behind the Center to apply supremacy in the administration of the association.

Fundamental Information:

- The Chennai-based association, which gets its lawful structure from the Prevention of Cruelty to Animals Act, 1960, outlines a scope of guidelines on how creatures should be others consciously treated all around.
- **The Prevention of Cruelty to Animals Act, 1960:** The Prevention of Cruelty to Animals Act is an Act of the Parliament of India instituted in 1960 to keep the curse of pointless agony or enduring on creatures and to alter the laws identifying with the aversion of mercilessness to creatures. According to the arrangements of the law the administration of India framed the Animal Welfare Board of India.

Topic: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

6. U.S. orders 'increased scrutiny' for visas

<http://www.thehindu.com/news/international/us-orders-increased-scrutiny-for-visas/article17656908.ece>

What's in news?

- The Trump organization has taught all its diplomatic missions worldwide to distinguish certain gatherings that need additional investigation and embrace a thorough reviewing process for issuing visas.
- Those applying for an American visa, including visitor and business visas, would be solicited to outfit points of interest from their work and living arrangement throughout the previous 15 years and all the telephone numbers they utilized as a part of the past five years.
- Additional conventions have been set up to keep the section into the U.S. of remote nationals who may help, bolster or perpetrate fierce, criminal or psychological oppressor acts and guarantee that those permitted to come in are thoroughly screened.
- The link taught visa issuing officers to ask extra inquiries to the candidates. It would likewise require the candidate to impart to visa officer all telephone numbers, messages and online networking accounts utilized as a part of the most recent five years.
- Consular officers ought not falter to decline any case showing security concerns-All visa choices are national security choices.

Topic: Environment Science and Ecology

1. Another reason to flip the off switch: light pollution

<https://www.enca.com/technology/another-reason-to-flip-the-off-switch-light-pollution>

What's in news?

- For the eleventh year running, urban areas worldwide will kill their lights 25th March to check Earth Hour in a worldwide invitation to take action on environmental change.
- The snapshot of obscurity ought to likewise fill in as an indication of another issue that gets far less consideration: light contamination.
- More than 80 percent of humankind lives under skies immersed with fake light. Manufactured lighting has been appeared to aggravate the regenerative cycles of a few creatures and the relocation of feathered creatures that explore utilizing the stars and to muddle night-flying bugs.
- In the United States and Western Europe, that figure goes up to 99 percent of the populace, the majority of whom can't perceive the Milky Way in the night sky.
- For people, circadian rhythms that manage hormones and other substantial capacities can likewise be tossed lopsided by an excess of light around evening time.
- Over the most recent 15 years, researcher, specialists, non-administrative associations and even UNESCO have joined the battle against light contamination by enumerating negative effects to wellbeing and prosperity - for people and different creatures.
- In 2012, the American Medical Association (AMA) inferred that introduction to "unreasonable" night light "can upset rest and fuel rest issue".
- Arguably, nobody experiences more light contamination than space experts whose telescopes are blinded by the glare of urban sparkle.
- Light contamination and it's conceivable connections to tumor, heftiness, diabetes and sadness.
- AMA raised another warning against utilization of light-emanating diodes, also called LEDs as road lightning framework uplifting news for the battle against an Earth-wide temperature boost, cutting on fossil-fuel consuming for power, yet it might be awful news for wellbeing.
E.g. - Bluish, high-power lights make a view-darkening glare, they have "five circumstances more noteworthy effect on circadian rest rhythms than ordinary road lights.
- The new innovation likewise clouded our perspective of the night sky much more than customary city lighting. LEDs could twofold or triple the glow of the sky" - which implies the stars get lost against the foundation.

2. Water in 320 of 640 dists polluted by chemicals

<http://epaperbeta.timesofindia.com/Article.aspx?eid=31806&articlexml=Water-in-320-of-640-dists-polluted-by-25032017015014>

What's in news?

- A greater part of India's populace relies on upon sullied water or has no entrance to water assets, turning the nation water stressed.
- A nation is water focused if every individual gets under 1,700 cubic meters of water. In India, the supply is 1,545 cubic meter.
- Water assets service predicts water accessibility could dive to 1,341 cubic meters in 2025 and as low as 1,140 by 2050. This situation mirrors water-shortage condition where per-individual accessibility is under 1,000 cubic meters.
- With 56% of India's populace depending on groundwater.
- Water in 320 of the nation's 640 locale is defiled by chemicals like fluoride, arsenic, and substantial metals like chromium and lead. Tainted water influences 6 lakh homes specifically. Chemicals, for example, fluoride and arsenic are to a great extent poisons brought on by nature; a few ventures, however, create these chemicals. Be that as it may, the water issue is brought about generally by overexploitation.
- A review led - inspected water from 300 wells, and discovered water from wells that ruptured the 30-meter profundity recorded more tainting.

Topic: Science and Technology

3. Gravitational waves jettison black hole

<http://www.thehindu.com/todays-paper/tp-national/gravitational-waves-kick-out-black-hole-from-galactic-core/article17660887.ece>

What's in news?

- NASA's Hubble space telescope has recognized a supermassive dark opening that has been kicked out of the focal point of a removed cosmic system by what could be the force of gravitational waves.
- Weighing more than one billion suns, the rebel dark opening is the most gigantic dark gap at any point distinguished to have been kicked out of its focal home.
- Researchers gauge that it took the identical vitality of 100 million supernovas detonating at the same time to cast off the dark gap.
- The most conceivable clarification for this propulsive vitality is that the creature protest was given a kick by gravitational waves unleashed by the merger of two strong dark gaps at the focal point of the host universe

- The pictures uncovered a brilliant quasar, the enthusiastic mark of a dark opening, living a long way from the galactic center. Dark gaps live in the focal point of worlds, so it's strange to see a quasar not in the middle.
- The group computed the dark gap's separation from the center the dark gap had voyage more than 35,000 light years from the middle, which is more than the separation between the sun and the focal point of the Milky Way, as per the review.
- **First anticipated by Albert Einstein, gravitational waves are swells in space that are made when two huge items impact. The swells are like the concentric circles created when a powerful shake is tossed into a lake.**

Terms in news:

- **Black hole:** A black hole is a region of spacetime exhibiting such strong gravitational effects that nothing—not even particles and electromagnetic radiation such as light—can escape from inside it.
- **Supernova:** A supernova is an astronomical event that occurs during the last stellar evolutionary stages of a massive star's life, whose dramatic and catastrophic destruction is marked by one final titanic explosion.
- **Quasar:** A quasar is an active galactic nucleus of very high luminosity.
- **Circadian rhythm** - roughly 24 hour cycle in the physiological processes of living beings, including plants, animals, fungi and cyanobacteria. Circadian rhythms are important in determining the sleeping and feeding patterns of all animals, including human beings. There are clear patterns of brain wave activity, hormone production, cell regeneration and other biological activities linked to this daily cycle.

Practice questions:

1. Which among the following are groundwater pollutants

1. Fluoride
2. Arsenic
3. Chromium
4. Lead

Choose the correct answer

- A. 1 and 2
- B. 1,2 and 4
- C. 1,2 and 3
- D. All of the above

Correct answer: D

Type: Current Affair

Level: Moderate

Explanation:

Water in 320 of the nation's 640 locale is defiled by chemicals like fluoride, arsenic, and substantial metals like chromium and lead

2. Which among the following with reference to XDR-TB

1. XDR-TB is resistant to second-line drugs
2. Extensively drug-resistant TB (XDR TB) is a rare type of multidrug-resistant tuberculosis (MDR TB) that is resistant to isoniazid and rifampin.

Choose the correct answer

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Correct answer: C

Type: Current Affair

Level: Moderate

Explanation: Extensively drug-resistant TB (XDR TB) is a rare type of multidrug-resistant tuberculosis (MDR TB) that is resistant to isoniazid and rifampin, plus any fluoroquinolone and at least one of **three injectable second-line drugs** (i.e., amikacin, kanamycin, or capreomycin). MDR TB is caused by an organism that is resistant to at least isoniazid and rifampin, the two most potent TB drugs.

3. Scientists who recently created a virtual black hole in the lab claimed to have observed for the first time a phenomenon predicted by British physicist Stephen Hawking more than thirty years ago according to which

- a) some particles can escape black holes
- b) black holes are spheres (3-D) and not two-dimensional as was earlier believed
- c) black holes cannot absorb sound waves classified as hyper-frequency waves
- d) Black holes can weaken and eventually disappear/collapse

Solution: A

Topic : Science and Technology

Type : Factual

Level : Medium

“For many years, scientists believed that nothing could ever escape from a black hole — not even light. However, in 1974, Stephen Hawking suggested particles, that are now called Hawking radiation, could escape black holes.”

“According to him if a particle and its antimatter appeared spontaneously at the edge of a black hole, one of the pair might be pulled into the black hole while the other escaped, taking some of the energy from the black hole with it. This would explain why black holes grow smaller and eventually disappear. However, since such emissions are feeble, no one has been able to measure Hawking radiation. Researchers have instead tried to build virtual black holes in labs to test the theory.”

4. Consider the statements :

1. Aadhaar is a 10 digit unique-identity number issued to all Indian residents based on their biometric and demographic data.
2. Aadhaar is not a proof of citizenship.

Which of the above statements is/are correct ?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Answer : B

Topic : Economy

Type : Factual

Level : Medium

Aadhaar is a 12 digit unique-identity number issued to all Indian residents based on their biometric and demographic data.

Aadhaar is not a proof of citizenship.

5. **Consider the statements :**

1. Competition Commission of India is a constitutional body
2. It is responsible for enforcing The Competition Act, 2002 throughout India.

Which of the above statements is/are correct ?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Answer : B

Topic : Regulatory Bodies

Level : Medium

Type : Factual

Competition Commission of India is a statutory body of the Government of India responsible for enforcing The Competition Act, 2002 throughout India and to prevent activities that have an appreciable adverse effect on competition in India. It was established on 14 October 2003.