# G.S. Paper -1

# **Topic: Art and Culture**

## 1. Bidriware imitations everywhere

http://www.thehindu.com/news/national/karnataka/bidriware-imitations-everywhere/article17760140.ece

#### Bidriware:

- Bidriware is a metal handicraft from Bidar.
- Developed in the 14th century C.E. during the rule of the Bahamani Sultans.
- The term 'Bidriware' originates from the township of Bidar, which is still the chief centre for the manufacture of the unique metalware
- Due to its striking inlay artwork, Bidriware is an important export handicraft of India and is prized as a symbol of wealth.



- The metal used is a blackened alloy of zinc(90%) and copper(10%) inlaid with thin sheets of pure silver.
- This native art form has obtained Geographical Indications (GI) registry.

## G.S. Paper -2

# **Topic: Polity**

# 1. Voters in bypolls can now verify their votes

http://www.thehindu.com/news/national/karnataka/voters-in-bypolls-can-now-verify-their-votes/article17760130.ece

## What's in news?

• Electronic Voting Machines (EVMs) that will be in use during the April 9 bypolls to Nanjangud and Gundlupet in the Karnataka State will be accompanied by Voter-Verifiable Paper Audit Trail (VVPAT) machines.

## How VVPAT works?

- The VVPAT, a machine with a printing unit, which is connected to the EVM, will print a ballot slip soon after the voter exercises his franchise on the EVM.
- The ballot slip containing the serial number, name and symbol of the chosen candidate will be visible to the voter for seven seconds.
- The candidate can see the slip through a glass case in the VVPAT for seven seconds. Then the ballot slip gets cut and drops into the drop box in the VVPAT machine and a beep will be heard.
- The voters will not be allowed to take the slip with them, to maintain confidentiality of the vote

- In the event of a voter raising a dispute that the ballot slip did not indicate the choice made in the EVM, there is a provision for a "test vote" to be carried out by the poll official in the presence of representatives of different parties in the booth. "If the test vote disproves the voter's contention, a FIR can be registered against the voter.
- This ensures transparency in the polling process.

# **Topic: Bilateral relations**

## 2. India and Malaysia to fight IS together: Najib Razak

http://www.thehindu.com/todays-paper/tp-national/india-and-malaysia-to-fight-is-together-najib-razak/article17760750.ece

## What's in news?

- PM meets Visiting Malaysian PM Najib Razak.
- Minutes of meeting
  - ✓ Joint cooperation to defeat Islamic State militants and the growing threat of radicalisation and extremism.
  - ✓ Extending support to India for a greater role in the maritime security of the Asia-Pacific region- the maritime issue is significant as both the countries have been demanding freedom of navigation in the South East Asian region, where China has been flexing muscles and has claimed most of the South China Sea.
  - ✓ Plan to hold a major joint conference on de-radicalisation.
  - ✓ Signed agreements air services, sports, human resources, palm oil production and research, and technological development. An agreement that will allow India to build a fertilizer plant in Malaysia was also signed.

# G.S. Paper -3

#### **Topic: Economy**

## 1. ED cracks down on 300 shell firms

http://www.thehindu.com/news/national/ed-cracks-down-on-300-shell-firms/article17759363.ece

#### What's in news?

 On accounts of large scale violation of money laundering and foreign exchange violations, Enforcement Directorate conducted search operation on 300 shell companies spread across 16 states.

# Search operation findings:

- ✓ After the demonetization drive was announced several companies were involved in the laundering of huge sums of cash .
- ✓ Certain shell firms were found to have remitted huge amounts to other countries for imports that never materialised. They had

- either produced forged bills of entry or had simply skipped the procedure.
- ✓ In a Kolkata-based case, over 50 companies were registered at the same address, which, on verification, was found to be of a vacant residential premises which had been rented out
- ✓ In another case, a shell firm was found to have exported carpets to its sister concern incorporated abroad. The export proceeds were never realised and the person behind these companies had applied to the Reserve Bank of India to write off the outstanding export proceeds.
- ✓ Of the 15 lakh registered companies, only six lakh file their annual returns. The ED suspect that a large number of these companies provide accommodation entries by raising fake inflated invoices to help the others evade tax. These companies also show share purchases at a premium for converting black money into white.

#### **Basic information:**

- **Money Laundering:** Money laundering is the process of transforming the profits of crime and corruption into ostensibly 'legitimate' assets
- **Enforcement Directorate:** The Directorate General of Economic Enforcement is a law enforcement agency and economic intelligence agency responsible for enforcing economic laws and fighting economic crime in India. It is part of the Department of Revenue, Ministry of Finance. It comprises officers of the Indian Revenue Service, Indian Police Service and the Indian Administrative Service. The prime objective of the Enforcement Directorate is the enforcement of two key Acts of the Government of India namely, the Foreign Exchange Management Act 1999 (FEMA) and the Prevention of Money Laundering Act 2002 (PMLA)
- **Shell Companies:** A shell company is a non-profit company. It does not have an active business or assets. It is mostly a company on papers which is used in business transactions between two other companies. It is not necessarily illegal but is often used for tax evasion

## Topic: Environmental science and Ecology

- 2. Wildlife ambulance customised to fill up waterholes in Wayanad <a href="http://www.thehindu.com/todays-paper/tp-national/wildlife-ambulance-customised-to-fill-up-waterholes-in-wayanad/article17760726.ece">http://www.thehindu.com/todays-paper/tp-national/wildlife-ambulance-customised-to-fill-up-waterholes-in-wayanad/article17760726.ece</a>
  What's in news?
- Customized wildlife ambulance at Wayanad Wildlife Sanctuary to quench the thirst of animals.
- Fist-of-its-kind initiative in Kerala, designed to fill ponds in the forests, with water supplied through tankers.

- The ambulance has been customised by installing two water tanks, each with a storage capacity of 5,000 liters, and two diesel pump sets, each with 5 horse power, for collecting and filling up water at a cost of nearly Rs. 1.5 lakh.
- Sanctuary is under pressure due to a lack of water availability deficit monsoon last year.
- The inflow of migrating wildlife, especially higher mammal such as elephants and gaur, from the Tiger Reserves of Karnataka and Tamil Nadu to the sanctuary, has increased considerably this season.
- **Outcome:** The shortage of water in the sanctuary would mean that animals would stray into human habitations, thereby intensifying the man-animal conflict.

# 3. Algal bloom may spare Indian waters

http://www.thehindu.com/sci-tech/science/algal-bloom-may-spare-indian-waters/article17757765.ece

#### What's in news?

- The coastal States of India may not suffer from the massive algal (green Noctiluca scintillans) bloom that has been reported from the Arabian Sea.
- Ocean-watchers had earlier reported that a bloom of the size of Mexico, which originated in the Gulf of Oman, had reached the Arabian Sea and feared that it could reach Indian shores.
- Satellite time series images also reveal that this offshore bloom initiates in the Oman waters by January and subsequently intensifies and spreads over almost half of the Arabian Sea till March end. Subsequently, it becomes weak and disappears as the waters start warming by April. Though the extension of the bloom towards Gujarat coast varies annually, typically it remains about 15 km away from the shore.

# Degradation and its impact:

- ✓ When Noctiluca cells degrade, associated detritus in the form of particulate organic carbon sinks to deeper waters.
- ✓ During this process, decomposition occurs by the microbes and oxygen that is dissolved in water is consumed for their oxidation.
- ✓ The decomposition reduces dissolved oxygen from the water column and **causes adverse effect on fish**.
- ✓ Secondly, degrading Noctiluca cells release ammonia in the water increasing toxic level and it causes fish mortality.
- ✓ Earlier studies in the bloom area had indicated that there was no significant increase in ammonia or decrease in dissolved oxygen during degrading stage of the bloom in the off shore waters of Gujarat.

#### Why bloom develops in Arabian Sea:

- ✓ Result of a continuous process of winter cooling and convective mixing.
- ✓ Cool dry continental air from the northeast causes an increase in surface density of the sea water due to evaporative cooling and increased salinity.
- ✓ The vertical mixing of the water masses causes recharge of water column with nutrients from the deep. The resulting nutrient enrichment increases the biological production of the water.

# 4. Eclipses of binary star shed light on orbiting exoplanet In a first, a massive exoplanet was discovered using X-ray observations

http://www.thehindu.com/sci-tech/science/eclipses-of-binary-star-shed-light-on-orbiting-exoplanet/article17757774.ece

#### What's in news?

- A team of scientists from Raman Research Institute, Bengaluru, and University of Delhi have seen for the first time indications of a massive planet orbiting a **low mass X-ray binary star system**.
- The technique that has been used, namely, **X-ray observations**, is a new way of detecting exoplanets
- The system is nearly 30,000 light years away and the planet is expected to be nearly 8,000 times as massive as the earth.
- MXB 1658-298, star–system is an X-ray binary and a part of the constellation Ophiuchus (serpent bearer).
- X-ray binaries consist of a pair of stars orbiting each other of which one is compact one such as a black hole or a neutron star (in this case, a neutron star).
- The neutron star draws matter from its less-massive companion. The mass when drawn generates X-rays which are detected by detectors placed in satellites in space.

# 5. IISc researchers' ecofriendly way of recycling e-waste

http://www.thehindu.com/sci-tech/science/iisc-researchers-ecofriendly-way-of-recycling-e-waste/article17757812.ece

# What's in news?

- Indian Institute of Science (IISc) researchers have found a novel way to recycle the mounting pile of electronic waste more efficiently and in an environmentally friendly manner.
- According to the United National Environmental Programme, about 50 million tonnes of e-waste is generated annually across the world.
- The new approach is based on the idea of crushing e-waste into nanosize particles using a ball mill at very low temperature ranging from -50 to 150 degree C.

- When crushed to nanosize particles for about 30 minutes, different classes of materials — metals, oxides and polymer — that go into the making of electronic items get physically reduced into their constituent phases, which can then be separated without using any chemicals
- The use of low-temperature grinding eliminates noxious emission.

#### **Process:**

- There are two processes that happen when milling. The polymer material breaks but metals get welded, some sort of solid-state welding resulting in mixing; the welded metals again get broken during milling. At low temperature mixing does not happen
- There is also a lower limit to which materials can be broken into when e-waste is milled at room temperature. The maximum size reduction that can be achieved is about of 200 nanometre.
- But in the case of low temperature ball milling the size can be reduced to 20-150 nanometres.
- The low-temperature ball mill was designed by Dr. Tiwary. The cryo-mill grinding chamber is cooled using liquid nitrogen and a small hardened steel ball is used for grinding the material in a controlled inert atmosphere using argon gas.
- The polymer becomes brittle when cooled to -120 degree C and ball milling easily breaks it into a fine power. Metals and oxides too get broken but are a bit bigger in size.
- The crushed powder was then mixed with water to separate the components into individual classes of materials using gravity. The powder separated into two layers the polymer floats at the top due to lower density, while metals and oxides of similar size and different density settle at the bottom. The bottom layer when diluted further separated into oxides at the top and metals at the bottom. The oxides and metals were present as individual elements.

# G.S. Paper -4

# Topic: Case study

# 6. Satyam Babu will walk free on Sunday

http://www.thehindu.com/news/national/andhra-pradesh/satyam-babu-will-walk-free-on-sunday/article17760513.ece

- The High Court pronounced its judgment on Friday that Mr. Babu was in no way connected to the rape and murder that took place in a private hostel at Ibrahimpatnam near Vijayawada on December 27, 2007.
- Satyam Babu spent around 8 years term in jail.
- Ethical issues involved:
  - ✓ Empathy

- ✓ Human rights violation
- ✓ Dignity and self respect.
- ✓ Emotional agony
- ✓ Moral judgment.

#### Prelims related facts:

- Kerala has one of the highest per capita consumption of liquor.
- Beary dialect to get its first dictionary by May <u>http://www.thehindu.com/news/national/karnataka/beary-dialect-to-get-its-first-dictionary-by-may/article17760098.ece</u>
  - **The Beary dialect,** spoken by an ethnic Muslim group in parts of Karnataka and Kerala, will have its first dictionary with meanings in Kannada and English.
  - The dictionary, with about 20,000 words, will have the original Beary word in Kannada script and an English **transliteration**. It would be followed by the meaning of the word in Kannada and in English.
  - Disappeared Beary words from local coversations: 'Eekel' (broomstick),
     'Yaake' (rope for drying clothes) and 'Mwaza' (socks).
  - Research works on 'Beary Language', mentions that there was a belief that Beary had a script known as 'Batte Baraha', which is now not in use. Now Kannada script is being used.
  - In another research work 'Mopilla Malayalam' the author says that the origin of Beary could be traced to the Tulu dialect.

## Terms in news:

1. **Transliteration** is a type of conversion of a text from one script to another that involves swapping letters in predictable ways.

## **Practice questions:**

- 1. "Friendship-2016", first ever joint military drills was conducted between
  - A. Russia and China
  - B. Russia and Pakistan
  - C. India and Bangladesh
  - D. Pakistan and China.

Correct Answer: B Topic: Current Affairs

Level: Easy

Explanation: Russian troops arrive in Pakistan for joint military exercise

'Friendship 2016'

- 2. Consider the following statement with reference to Bidiriware
  - 1. Bidriware is a metal handicraft from Bidar.
  - 2. The metal used is a blackened alloy of zinc(90%) and copper(10%) inlaid with thin sheets of pure silver.
  - 3. This native art form has obtained Geographical Indications (GI) registry

## Choose the correct answers

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. All are correct

Correct Answer: D

Topic: Handicraft tradition

Level:moderate Explanation:

#### **Bidriware:**

- Bidriware is a metal handicraft from Bidar.
- Developed in the 14th century C.E. during the rule of the Bahamani Sultans.
- The term 'Bidriware' originates from the township of Bidar, which is still the chief centre for the manufacture of the unique metalware
- Due to its striking inlay artwork, Bidriware is an important export handicraft of India and is prized as a symbol of wealth.



- The metal used is a blackened alloy of zinc(90%) and copper(10%) inlaid with thin sheets of pure silver.
- This native art form has obtained Geographical Indications (GI) registry.

GS Paper 1

Topic: Social Issues

Centre may remove cap on parent maintenance

http://www.thehindu.com/news/national/centre-may-remove-cap-on-parent-maintenance/article17764137.ece

# Key Points:

- At present, kids require not pay more than Rs.10,000.
- The administration is reflecting on conveying authoritative changes to evacuate the month to month roof of Rs.10,000 on the support paid by kids to guardians and present a rating instrument for associations giving home care administrations to the elderly.
- On the off chance that the proposed alterations to the Maintenance and Welfare of Parents and Senior Citizens (MWPSC) Act get through, the support add up to be chosen by senior resident tribunals for the dismissed guardians will rely on upon their need and the financial state of their kids.

GS Paper 2

Topic: Indian Polity

Govt. will help reduce pendency: PM

http://www.thehindu.com/news/national/technology-can-help-judiciary-modi/article17762083.ece

# Key Points:

- Conveyance of justice crippled in view of a lack of judges, says Chief Justice Khehar
- Prime Minister Narendra Modi on Sunday guaranteed Chief Justice of India J.S.
  Khehar that the government would make its share of "commitment" to help
  satisfy his "resolve" to lessen the weight on the legal and manage the high
  number of pending cases.
- The Prime Minister made the vow in the wake of watching the "torment" in Justice Khehar's discourse in which he mourned the pendency of cases in the higher and lower courts.

Utilization of innovation

- Mr. Modi praised Justice Khehar's set out to handle the pendency of cases and his weight on disentanglement of legitimate work through utilization of innovation.
- The Prime Minister pushed the utilization of innovation and digitalisation in the legal framework to defeat the weight of cases and old laws.

Topic: Policies of developed countries affecting India's interests

'Foreign investor norms a barrier' The annual USTR report lists irritants for investors in e-commerce in India

http://www.thehindu.com/business/Economy/foreign-ownership-norms-a-barrier/article17763366.ece

# **Key Points**:

- Indian directions on remote possession in web based business and other online-related administrations were significant hindrances for abroad speculators, as indicated by a report by the U.S. President Donald Trump's organization.
- The discoveries were a piece of the cover remote exchange hindrances from the Office of the United States Trade Representative (USTR).
- The yearly report focuses to a rundown of exchange aggravations in 63 countries.
- India takes into consideration 100% remote direct interest in business-tobusiness (B2B) electronic trade, however to a great extent denies outside interest in business-to-buyer (B2C) electronic business exchanges.
- Outside direct venture is permitted in a market-based electronic retailing model, yet not in the stock based model.
- This tight special case confines the capacity of the larger part of potential B2C electronic business outside financial specialists to get to the Indian market.
- The exchange boundaries report likewise called attention to India's duty (6% leveling demand) on outside internet promoting stages was not standard with the global standards and cautioned the require in its present shape may hinder remote exchange and increment the danger of striking back from different nations where Indian organizations are working together.
- India as of late started evaluating a 'balance impose', which is an extra 6% withholding charge on outside internet promoting stages, with the apparent objective of "evening out the playing field" between inhabitant specialist co-ops and non-occupant specialist co-ops.

# GS Paper 3

Topic: Infrastructure

Swap terrorism for tourism, Modi tells Kashmiri youth

http://www.thehindu.com/news/national/other-states/pm-narendra-modi-inaugurates-indias-longest-road-tunnel-chenaninashri-in-jammu-and-kashmir/article17762274.ece

#### Key Points:

- Prime Minister throws open 9.2-km-long Chenani-Nashri all-weather tunnel.
- Inaugurating the country's longest tunnel of 9.28 km in Jammu, Prime Minister on Sunday asked Kashmiri youth to make a choice between tourism and terrorism.

#### Chenani -Nashri all-weather tunnel

- Worked amongst Udhampur and Ramban at a rise of 1,200 meters on a standout amongst the most troublesome landscapes of the Himalayas, the Chenani-Nashri passage is the nation's longest street burrow as well as happens to be Asia's longest bi-directional parkways burrow.
- A perfect case of 'Make in India' and 'Skill India' activity of the Government of India, the passage is 9.2 km long with twin-tube all-climate entry. It shapes some portion of the venture for extending of the National Highway No-44 or the old NH-1A from Jammu to Srinagar.

Topic: Internal Security

Counterfeiting of new notes worries agencies

http://www.thehindu.com/news/national/counterfeiting-of-new-notes-worries-agencies/article17764449.ece

## Key Points:

- Authorities need security highlights changed each 3-4 years.
- That the new Rs.2,000 and Rs.500 notes have a similar security includes as the old Rs.500 and Rs.1,000 ones has the security offices stressed.
- To check duplicating, the security components of higher category notes, for example, Rs.2,000 and Rs.500, ought to be changed each 3-4 years as per worldwide measures.
- In the four months since the administration declared its choice to scrap the old Rs.500 and Rs.1,000 notes on November 8, 2016, fake Rs.2,000 notes with a

face estimation of over Rs.66 lakh have been identified by the Reserve Bank of India and the State police constrains the nation over.

Topic: Taxation

GAAR raises issue of taxman's powers

http://www.thehindu.com/business/Economy/gaar-raises-issue-of-taxmans-powers/article17763312.ece

# Key Points:

- Self-assertive utilization of expert a worry.
- With the legislature executing its hostile to assessment evasion rules from April 1, industry is worried about the more noteworthy subjective expert being given to the duty office and how this could render exchanges unrewarding.
- The General Anti-Avoidance Rules (GAAR) are intended to keep the evasion of expense by exploiting global assessment laws.
- The standards say that if the real result of an exchange is a tax break and there is no stable business reason for the exchange, then the administration can conjure GAAR and rename the exchange or the benefits emerging from it.

Topic : Environment

Is the green edging out the black?

http://www.thehindu.com/business/Industry/is-the-green-edging-out-the-black/article17763199.ece

## Key Points:

• As clean energy becomes cheap and its supply smooth, coal-based power plants may face dim future.

# Campaigns against coal

- All around, tree huggers have propelled a war against coal. A few assets and budgetary organizations (quite the venture reserve of the Norwegian government) have chosen not to put their cash in coal-related activities, and to step by step haul out the speculations effectively made.
- The Guardian daily paper is running a 'keep-it-in-the-ground' battle, requiring a stop to creation of coal. In Germany, green gatherings are onto a comparative battle, 'Ende Gelande' ("up to this point and no further").
- These developments have been reinforced by sustainable power source getting to be noticeably modest and handleable.

• The impact of these is getting to be plainly apparent. As indicated by a current report of the International Energy Agency, sustainable power source took into account the greater part of the incremental interest for power in 2016.

Topic: Disaster Management

Coping with summer Heatwaves may become more frequent; good action plans can help prepare for the worst

http://www.thehindu.com/opinion/editorial/coping-withsummer/article17763218.ece

# Key Points:

- Torrid summers, when the mercury takes off 4i¿½C to 6i¿½C over the normal and produces heatwaves in a few States amongst April and June, may turn out to be more incessant in coming years.
- Not exclusively will there be more hot days, the spells of warmth stress clearing crosswise over a lot of India are probably going to develop longer.
- The logical agreement is that heatwaves will become more grounded and grow their geological spread in the south, affected by the ocean surface temperature in the Indian and Pacific Oceans. With rising nursery gasses, their effect can just heighten. Despite the fact that the quantity of individuals passing on because of warmth stress a year ago was half of the earlier year's toll of 2,040, the need to develop nitty gritty activity arranges at the level of States, areas and urban communities is currently basic.
- It is empowering that the National Disaster Management Authority is directing States, in association with the India Meteorological Department, to develop warm activity arrange conventions. The reaction to trouble brought about by over the top warmth must be both rapid and expert. Europe redesigned its readiness to deal with an emergency after a devastating heat wave in 2003 murdered a large number of individuals, more than 14,800 of them in France alone. In the Indian setting, edit disappointments and disturbance of power supply because of sudden pinnacle request are normal.
- Individuals encounter lack of hydration, warmth issues and savage heatstroke. The elderly are especially at hazard, since higher temperatures influence blood consistency and raise the danger of thrombosis.
- Better meteorological guaging can give an early cautioning about a coming hot spell amid the mid year window. This gives the NDMA and the States adequate chance to dispatch an activity convention: to educate general society when the temperature crosses the edge settled by the IMD, prompt on prudent steps, and help the individuals who are most defenseless, for example, more established grown-ups, cultivate specialists and those seeking after outside livelihoods.
- Ahmedabad, for example, drew up a city-level activity arrange in the wake of its 46.8i. ½C heatwave of 2010 with support from general wellbeing organizations.

- Setting up the wellbeing framework to distinguish manifestations of warmth stress and giving treatment through urban wellbeing focuses is one intercession it settled on.
- Exploring school timetables, rescheduling work timings to cooler hours, making water broadly accessible and saving religious locales and libraries as cooling focuses were others. European and American approach reactions, for example, making green and blue urban spaces to give tree shade and higher dampness, and also lodging plan that slices warm through the albedo impact of reflected sun powered vitality, hold all inclusive interest. Some of these aloof guards are really vital to vernacular practices and will serve everybody well. It is basic to concentrate the viability of warmth activity arranges and share the outcomes crosswise over States to accomplish best practices.

# MCQs:

- 1. Recently Prime Minister has dedicated Chenani -Nashri all-weather tunnel to the nation. It is in which state?
- a) Arunachal Pradesh
- b) Himachal Pradesh
- c) Uttarakhand
- d) Jammu and Kashmir

Answer: D

Topic: Roadways

Level: Easy

## Explanation:

- Worked amongst Udhampur and Ramban at a rise of 1,200 meters on a standout amongst the most troublesome landscapes of the Himalayas, the Chenani-Nashri passage is the nation's longest street burrow as well as happens to be Asia's longest bi-directional parkways burrow.
- A perfect case of 'Make in India' and 'Skill India' activity of the Government of India, the passage is 9.2 km long with twin-tube all-climate entry. It shapes some portion of the venture for extending of the National Highway No-44 or the old NH-1A from Jammu to Srinagar.

- 2. Consider the statements:
- 1. General anti-avoidance rule (GAAR) is an anti-tax avoidance Rule of India.
- 2. It is framed by the Department of Revenue under the Ministry of Finance.

Which of the above statements is /are correct?

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

Topic: Taxation

Level: Medium

# Explanation:

General anti-avoidance rule (GAAR) is an anti-tax avoidance Rule of India. It is framed by the Department of Revenue under the Ministry of Finance.

The regulation allows tax officials to deny tax benefits, if a deal is found without any commercial purpose other than tax avoidance. It allows tax officials to target participatory notes. Under GAAR, the investor has to prove that the participatory note was not set to avoid taxes. It also allows officials to deny double taxation avoidance benefits, if deals made in tax havens like Mauritius were found to be avoiding taxes

#### G.S.PAPER-2

# **Topic: Issue related to Education**

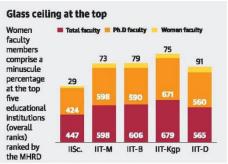
1. IISc tops national rankings, IIT-Madras comes second <a href="http://www.thehindu.com/education/iisc-tops-national-rankings-iit-madras-comes-second/article17782108.ece">http://www.thehindu.com/education/iisc-tops-national-rankings-iit-madras-comes-second/article17782108.ece</a>

#### What's in news?

- Ranking of institutions, National Institutional Ranking Framework (NIRF), 2017 –Human Resource Development ministry, India.
  - ✓ First tried attempt to rank Indian premier institutions.
  - ✓ Key fact:
    - 1) The Indian Institute of Science, Bengaluru-tops the list.
    - IIT-Madras ranks second, while JNU ranks sixth in the all-India list.
    - 3) The seven top IITs,

      Jawaharlal Nehru University
      (JNU) and Benaras Hindu

      University (BHU) figure in the top 10.



- SOURCE: NATIONAL INSTITUTIONAL RANKING FRAMEWORK (MHRD)
- 4) Indian Institutes of Management performances not upto the mark- IIM-Ahmedabad, the top business school, standing 17th, and all other IIM's rank below 20.'
- 5) There are separate lists within disciplines for engineering, management and pharmacy, and for universities and colleges. Among engineering colleges, the IITs at Chennai, Mumbai, Kharagpur, New Delhi and Kanpur are among the top five. Among universities, the top five are IISc, JNU, BHU, Jawaharlal Nehru Centre for Advanced Scientific Research (Bengaluru) and Jadavpur University, Kolkata.

## 6) Parameters used:

- ✓ Teaching-learning resources (student strength, faculty-student ratio, faculty qualifications and experience, financial resources and utilisation)
- ✓ Research and professional practice (publications, quality of publications, patents, projects)
- ✓ Graduation outcomes (placement and higher studies, salary, Ph.D degrees awarded)
- ✓ Outreach and inclusivity (diversity in student pool
- ✓ Perception (among peers, employers and the public).

# **Topics: Government Policies**

# 2. Steps to prevent fireworks accidents

http://www.thehindu.com/news/national/steps-to-prevent-fireworks-accidents/article17786741.ece

#### What's in news?

- Centre issued directives for safe display of fireworks
  - ✓ Authorized fireworks approved by the **Chief Controller of Explosives** shall be used for public display of fireworks.
  - ✓ For **authorisation of traditional fireworks**, including Amittus, Kuzhiminnal, Palm leaf crackers, multishots and gundus, manufacturers shall apply to the Chief Controller of Explosives, Petroleum and Explosives Safety Organisation (PESO), Nagpur, as per Rule of the Explosives Rules 2008, accompanied by particulars, namely nature, composition, percentage of ingredients, dimensions, process of manufacture and performance characteristics of the fireworks.
  - ✓ PESO will approve the fireworks within 10 days and after submission of fireworks samples, authorisation will be accorded within 30 days.
  - ✓ The District Magistrate shall instruct festival organisers to conduct risk assessment by reputed organisations to identify potential hazards arising out of fireworks display prior to applying for display licence and ensure that relevant provisions of the Explosives Rules, 2008 are complied with.
  - ✓ Based on the assessment, a disaster management plan shall be prepared by the district administration before the fireworks display.

# **Topic: Bilateral relations**

#### 3. PM's Israel trip may see UAV deal

http://www.thehindu.com/news/national/pms-israel-trip-may-see-uav-deal/article17784474.ece

#### What's in news?

- Heron TP armed Unmanned Aerial Vehicles (UAV)
  - ✓ India's first armed drones.
  - ✓ UAVs for the Indian Air Force (IAF) are being manufactured in Israel and there is possibility of them being handed over to the IAF in the near future.
  - ✓ The deal is expected to cost around \$400 million for 10 drones.
  - ✓ The discussion for the Heron TP drones has been going on for several years.
  - ✓ India currently operates a large number of Israeli-built Heron and Searcher UAVs, which were inducted since the late 1990s.

✓ India also procured a small number of **Harpy loitering** drones in the past which can destroy targets by direct hits.

#### ✓ Need for UAVs:

- Surveillance
- Armed variants would give decision makers a new and safe option in planning short and swift strikes on terrorist camps.

## √ Basic Information: Heron TP

- ➤ Medium Altitude Long Endurance (MALE) drone which can fly upto an altitude of 45,000 feet.
- Endurance of over 30 hours and can carry a mission payload of 1,000 kgs.

# 4. Malaysian PM seeks early FTA

http://www.thehindu.com/todays-paper/tp-business/malaysian-pm-seeks-early-fta/article17788474.ece

## What's in news?

- Malaysian Prime Minister pitched for the conclusion of negotiations on the proposed **Regional Comprehensive Economic Partnership (RCEP)**mega-regional Free Trade Agreement (FTA) between 16 Asia Pacific nations, including Malaysia and India.
- Malaysia and India to work on ways to boost bilateral trade and investment.
- Regional Comprehensive Economic Partnership countries include- India, Japan, China, South Korea, Australia, New Zealand and the 10-member ASEAN bloc, including Malaysia.

#### G.S.PAPER-3

#### **Topic: Security issues**

# 1. Defence Ministry nod to buy Barak missiles

http://www.thehindu.com/news/national/defence-ministry-nod-to-buy-barak-missiles/article17784426.ece

## What's in news?

- The Defence Acquisition Council (DAC) of the Defence Ministry approved the purchase of **Barak surface-to-air missiles** (SAM) for the Navy.
- Barak are now installed on most of the front-line warships, including the aircraft carrier INS Vikramaditya.

#### **Basic Information:**

## Barak Missile:

- Barak: Is an Indian-Israeli surface-to-air missile (SAM), designed to defend against any type of airborne threat including aircraft, helicopters, anti-ship missiles, and UAVs as well as cruise missiles and combat jets out to a maximum range of 70 km.
- Both maritime and land-based versions of the system exist.
- Barak 8 was jointly developed by Israel Aerospace Industries (IAI), India's Defence Research & Development Organisation (DRDO), Israel's Administration for the Development of Weapons and Technological Infrastructure, Elta Systems, Rafael and other companies.
- Bharat Dynamics Limited (BDL) will produce the missiles.

# **Topic: Environment and Ecology**

2. Indonesia's 'selfie monkey' threatened

http://www.thehindu.com/todays-paper/tp-national/indonesias-selfie-monkey-threatened/article17789499.ece

#### What's in news?

- Celebes crested macaque under serious threat cause of habitat loss and hunting.
- The macaques and some other animals at the market are protected by Indonesian law but trade in exotic creatures is still thriving.
- It has been classified as critically endangered under IUCN's Red Data book

#### **Basic Information:**

- PETA: People for the Ethical Treatment of Animals
  - ✓ American animal rights organization based in Norfolk, Virginia.
  - ✓ Largest animal rights group in the world.
  - ✓ Its slogan is "animals are not ours to eat, wear, experiment on, use for entertainment, or abuse in any other way."

## G.S.PAPER-4

**Topic: Case study** 

1. 'Operation missing key' executed in nick of time

http://www.thehindu.com/news/national/karnataka/operation-missing-key-executed-in-nick-of-time/article17780683.ece

**Scenario:** Every day, around 8 a.m., the assistant treasury officer in charge of the sub-treasury unlocks the room where the question papers are stored. The

papers are loaded into vans and distributed to exam centres. However, on Monday morning, the officer of Sindhanur taluk — the only person to have the key— failed to show up. At first, officials on SSLC exam duty assumed he was running late, but when he did not turn up at all, they began to panic. When they learned that the assistant treasury officer, Amare Gowda Patil, was out of station, several of them rushed to his relative's house to find out where he was. The relatives directed them to the officer's house. By then, they had managed to get in touch with Mr. Patil, who said that he was in his hometown.

Following Mr. Patil's instructions closely, the officials obtained the key from his house, and made it back to the sub-treasury at 8.45 a.m.

#### Inference:

- **Dereliction of duty:** A service member who is derelict has willfully refused to perform his duties (or follow a given order) or has incapacitated himself in such a way that he cannot perform his duties.
- Lack of Accountability, negligence, miscommunication.

#### **ACTS IN NEWS**

#### 1. Swadesh Darshan Scheme:

- Implementing agency: Ministry of Tourism.
- Completely funded by central government.
- Swadesh Darshan Scheme is based on some of tourist circuit that will be covered under the PRASAD (Pilgrimage Rejuvenation and Spiritual Augmentation Drive) and Swadeshi Darshan.

# Features:

- ✓ Attract more tourists.
- ✓ Theme based tourism.
- ✓ The tourist or visitor will get an opportunity to visit the specific tourist circuit in a single tour. The tourists can take the pleasure of thematic tourism under this scheme.
- ✓ The scheme promotes the Indian tourism and development of various pilgrimage sites; the scheme also encourages the local inhabitants to be aware of the issue of maintenance of the city. The local amenities like roads, water food and other things should be maintained to attract more tourist.
- ✓ Employment generation in tourism sector.
- ✓ Under the Swadesh Darshan scheme, thirteen thematic circuits have been identified, for development namely: North-East India Circuit, Buddhist Circuit, Himalayan Circuit, Coastal Circuit, Krishna Circuit, Desert Circuit, Tribal Circuit, Eco Circuit, Wildlife Circuit, Rural Circuit, Spiritual Circuit, Ramayana Circuit and Heritage Circuit.

- ✓ **Under the PRASAD scheme thirteen sites** have been identified for development, namely: Amritsar, Ajmer, Dwaraka, Mathura, Varanasi, Gaya, Puri, Amaravati, Kanchipuram, Vellankanni, Kedarnath, Kamakhya and Patna.
- ✓ Under the 'PRASAD' scheme the focus is on **development and beautification of the identified pilgrimage destinations**.

  Whereas, in the 'Spiritual Circuit' identified under the Swadesh Darshan scheme, the thrust is on development of particular thematic circuit consisting of various religious/spiritual destination in a State and Union Territory.

## **TOPICS or TERMS IN NEWS**

# 1. The United Nations Human Rights Council (UNHRC):

- **UNHRC** is a United Nations System inter-governmental body responsible for promoting and protecting human rights around the world. Its 47 seats are filled by member states elected for three-year terms.
- The UN General Assembly elects the members who occupy the UNHRC's 47 seats.
- The General Assembly takes into account the candidate States' contribution to the promotion and protection of human rights, as well as their voluntary pledges and commitments in this regard.
- The term of each seat is three years, and no member may occupy a seat for more than two consecutive terms. The seats are distributed among the UN's regional groups as follows: 13 for Africa, 13 for Asia, six for Eastern Europe, eight for Latin America and the Caribbean (GRULAC), and seven for the Western European and Others Group (WEOG).
- The UNHRC addresses human rights-related situations in all UN member states. The UNHRC also addresses important thematic human rights issues such as freedom of association and assembly, freedom of expression, freedom of belief and religion, women's rights, LGBT rights, and the rights of racial and ethnic minorities.

# 2. National Investigating Agency:

- ✓ National Investigation Agency (NIA) is a central agency established by the Indian Government to combat terror in India. It acts as the Central Counter Terrorism Law Enforcement Agency.
- ✓ The agency is empowered to deal with terror related crimes across states without special permission from the states.
- ✓ The Agency came into existence with the enactment of the National Investigation Agency Act 2008.
- ✓ **Jurisdiction:** A State Government may request the Central Government to hand over the investigation of a case to the NIA, provided the case has

been registered for the offenses as contained in the schedule to the NIA Act.

Central Government can also order NIA to take over investigation of any scheduled offense anywhere in the India.

✓ **Special courts:** Various Special Courts have been notified by the Central Government of India for trial of the cases registered at various police stations of NIA.

Any question as to the jurisdiction of these courts is decided by the Central Government. These are presided over by a judge appointed by the Central Government on the recommendation of the Chief Justice of the High Court with jurisdiction in that region.

Supreme Court of India has also been empowered to transfer the cases from one special court to any other special court within or outside the state if the same is in the interest of justice in light of the prevailing circumstances in any particular state.

The NIA Special Courts are empowered with all powers of the court of sessions under Code of Criminal Procedure, 1973 for trial of any offense.

3. **Rohingya people:** The Rohingya people are Muslim Indo-Aryan peoples from the Rakhine State, Myanmar. According to the Rohingyas and some scholars, they are indigenous to Rakhine State, while other historians claim that the group represents a mixture of precolonial and colonial immigrations. The official stance of the Myanmar government, however, has been that the Rohingyas are mainly illegal immigrants who migrated into Arakan following Burmese independence in 1948 or after the Bangladesh liberation war in 1971. International media and human rights organizations have often described Rohingyas as one of the most



persecuted minorities in the world. According to the United Nations, the human rights violations against Rohingyas could be termed as "crimes against humanity".

# PRACTICE QUESTIONS

- 1. Consider the following statement with reference to Swadesh Darshan Scheme
  - 1. It is completely funded by Central government
  - 2. Ministry of tourism is the implementing agency

3. It has two components – PRASAD and Swadeshi Darshan under its ambit.

Choose the correct statement

- a. Only 1
- b. Only2
- c. 1 and 3
- d. All are correct

Correct answer: d Topic: Scheme Level: Moderate Explanation:

## Swadesh Darshan Scheme:

- Implementing agency: Ministry of Tourism.
- Completely funded by central government.
- Swadesh Darshan Scheme is based on some of tourist circuit that will be covered under the PRASAD (Pilgrimage Rejuvenation and Spiritual Augmentation Drive) and Swadeshi Darshan.
- 2. Choose the correct circuits that comes under thematic tourism circuit Swadesh darshan Scheme
  - 1. North-East India Circuit
  - 2. Buddhist Circuit
  - 3. Himalayan Circuit
  - 4. South Indian Circuit

Choose the correct statement

- a. 1,2 and 4
- b. 1 and 3
- c. 1,2 and 3
- d. All are correct

Correct answer: c Topic: Scheme Level: Moderate Explanation:

- ✓ Under the Swadesh Darshan scheme, thirteen thematic circuits have been identified, for development namely: North-East India Circuit, Buddhist Circuit, Himalayan Circuit, Coastal Circuit, Krishna Circuit, Desert Circuit, Tribal Circuit, Eco Circuit, Wildlife Circuit, Rural Circuit, Spiritual Circuit, Ramayana Circuit and Heritage Circuit.
- 3. As per IUCN's RED DATA book Celebes crested macaque is

- A. Critically endangered species
- B. Vulnerable species
- C. Least concerned species
- D. None of the above

Correct answer: A

Topic: Environmental science and ecology

Level: Moderate Explanation:

Celebes crested macaque under serious threat cause of habitat loss and hunting.

The macaques and some other animals at the market are protected by Indonesian law but trade in exotic creatures is still thriving.

It has been classified as critically endangered under IUCN's Red Data book

- 4. Consider the following statements about Vikramshila University:
  - 1. It was centre of Budhist learning centre.
  - 2. It was established by King Dharmapala of Pala dynasty.

Which of the above statements is/are correct?

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

Answer: C

Topic: Culture

Type: Factual

Level: Moderate

# Explanation:

The institution, one of the two important seats of Buddhist teaching in India during the Pala dynasty rule, was established by King Dharmapala as a centre of Buddhist and Tantric learning.

- 5. Consider the statements about BS Standards:
  - 1. The standards, based on European regulations were first introduced in 2000.
  - 2. Since October 2010, Bharat Stage (BS) III norms have been enforced across the country.
  - 3. In 13 major cities, Bharat Stage IV emission norms have been in place since April 2010.

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: D

Topic: Environment

Type: Factual

Level: Medium

#### Explanation:

The standards, based on European regulations were first introduced in 2000. Progressively stringent norms have been rolled out since then. All new vehicles manufactured after the implementation of the norms have to be compliant with the regulations. Since October 2010, Bharat Stage (BS) III norms have been enforced across the country. In 13 major cities, Bharat Stage IV emission norms have been in place since April 2010 and It's enforced for whole country from April 2017. In 2016, the Indian government announced that the country would skip the BS-V norms altogether and adopt BS-VI norms by 2020.

#### G.S.PAPER-2

# 1. Liquor drives State Highways to turn local

http://www.thehindu.com/todays-paper/tp-national/liquor-drives-state-highways-to-turn-local/article17820042.ece

#### What's in news?

- **Back ground information:** Supreme Court recently banned sale of liquors within 500 m of National and State Highways in order to prevent accidents caused due to drunken driving.
- Circumvent the orders: States are now re –classifying State Highways into local roads.

Eg: The Rajasthan government passed an order to convert a portion of their State Highway roads passing through populous areas into urban and district roads.

# De-notifying Highways:

- ✓ State government can issue a notification to convert State Highways into district roads.
- ✓ De-notification of national highways can only be affected by the Union Road Transport and Highways Ministry.

# Implications of De-notifying National Highways:

- ✓ Maintenance of National Highways burden will be passed on to state government.
- ✓ Few states lack the capability and financial resources to take additional burden on them.

# • Key Governmental bodies and Reports supporting the ban:

- i. **National Road Safety Council:** had earlier in its meeting pitched in for banning granting license to open liquor bars along the national highways.
- ii. Parliamentary mandate of zero tolerance for drunken-driving.
- iii. **Ministry of Road Transport and highways:** In its various advisory notes to the states had advised to prevent accident happening due to drunken driving.

#### Basic information:

## **National Road Safety Council**

- ✓ Advisory body.
- ✓ It was established under section 215 of Motor Vehicles Act, 1988 with the objective of improving road safety aspects in road transport sector.

#### **✓** Members:

The Council is chaired by the Hon'ble Cabinet Minister of the Ministry of Road Transport and Highways (MORTH).

The official members of NRSC include the Ministers of State for MORTH, Minister-in-charge of Road Transport in States/UTs, representatives from Ministry of Home Affairs, Human Resource Development, Railways, Department of heavy Industry, Ministry of Environment and Forests, Secretary of MORTH, Chairman of National Highways Authority of India, Director General of Roads Development of MORTH and Joint Secretary (Transport).

# **Topic: bilateral Relations:**

# 2. Brexit's shadow: India vows to deepen ties

http://www.thehindu.com/business/brexits-shadow-india-vows-to-deepenties/article17818623.ece

# Highlights of 9th UK-India Economic and Financial Dialogue between Finance Minister and U.K. Chancellor

- ✓ Commitment to strengthen economic cooperation and collaborate on cross-border tax evasion and avoidance.
- ✓ Both the side agreed to collaborate in determining the status of wealth deposited in foreign financial accounts by nationals of both countries.
- √ Commendable moves from both the side:
  - National Highways Authority of India's proposal to issue a masala bond in London.
  - ➤ IREDA's plans to issue a green bond in London and list their masala bonds on the London Stock Exchange within six months.
  - ➤ Recent introduction of a fast-track investment promotion mechanism, which provides a single window for U.K. companies that are looking to either establish or expand their business in India.
  - ➤ Encouraging timely implementation of the G20/OECD Base
    Erosion and Profit Shifting Project outputs and called on other
    nations to meet their commitments.
  - > The exchange of information between the U.K. and India under the Common Reporting Standards on Automatic Exchange of Tax Information will begin this calendar year.

#### **Basic information:**

# What are Masala Bonds?

- ✓ Masala bonds are bonds issued outside India but denominated in Indian Rupees, rather than the local currency.
- ✓ Unlike dollar bonds, where the borrower takes the currency risk, masala bond makes the **investors bear the risk**.

- ✓ Masala bonds will help to internationalize the Indian rupee and also deepen the Indian financial system.
- ✓ By issuing bonds in rupees, an Indian company is shielded against the risk of currency fluctuation, typically associated with borrowing in foreign currency.
- ✓ Cost of borrowing could also turn out to be lower than domestic markets.

#### What are Green Bonds?

- ✓ Green bonds announces the purpose for raising the capital- to fund 'green' projects, which typically include those relating to renewable energy, emission reductions and so on.
- ✓ Green bonds typically carry a lower interest rate than the loans offered by the commercial banks and are not risky too, as the bonds are tied to the insurer and not the successful implementation of the projects.

# National Highway Authority of India

- ✓ Autonomous agency of the Government of India
- ✓ Responsible for management of a network of over 70,000 km of National Highways in India.
- ✓ It is a nodal agency of the Ministry of Road Transport and Highways.

# IREDA: Indian Renewable Energy Development Agency Limited

- ✓ Mini Ratna (Category I) Government of India Enterprise under the administrative control of Ministry of New and Renewable Energy (MNRE).
- ✓ IREDA is a Public Limited Government Company established as a Non-Banking Financial Institution in 1987 engaged in promoting, developing and extending financial assistance for setting up projects relating to new and renewable sources of energy and energy efficiency/conservation.

# BASE EROSION and PROFIT SHIFTING PROJECT OUTPUT:

Base erosion and profit shifting (BEPS) refers to tax avoidance strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations.

## Tax Evasion and Tax Avoidance :

✓ Tax evasion is the illegal evasion of taxes by individuals, corporations, and trusts. Tax evasion often entails taxpayers deliberately misrepresenting the true state of their affairs to the tax authorities to reduce their tax liability and includes dishonest

- tax reporting, such as declaring less income, profits or gains than the amounts actually earned, or overstating deductions.
- ✓ In contrast, tax avoidance is the legal use of tax laws to reduce one's tax burden. Both tax evasion and avoidance can be viewed as forms of tax noncompliance, as they describe a range of activities that intend to subvert a state's tax system, although such classification of tax avoidance is not indisputable, given that avoidance is lawful, within self-creating systems

#### G.S.PAPER-3

# **Topics: Economics**

# 1. Confusion reigns on CAG audit of GST data

http://www.thehindu.com/business/Economy/confusion-reigns-on-cagaudit-of-gst-data/article17819889.ece

#### What's in news?

CAG is worried about how and from where its auditors should get access to GST data.

# Why CAG needs this data?

To decide compensation for states and to determine States revenue share as per new GST norms.

#### Data required?

It requires access to data pertaining to revenue that would accrue to States from alcohol and petrochemicals (both outside the ambit of GST)

# Who is collecting data in India with respect to tax matters? GSTN

# Why GSTN is not allowing access to the data?

GSTN has refused to give the CAG access to its network, saying it is only holding the data in a fiduciary capacity since the tax data originally belongs to the Centre and States.

GSTN is owned by a private company (51% stake in the company is held by private companies such as HDFC and ICICI Bank), and thus cannot be audited by CAG

**CAG's Counter argument**: The CAG has pointed out in official communications in recent times that under the new Companies Act, GSTN can be counted as government-controlled company since its strategic control will be with the government. Like any PSU, the CAG could depute chartered accountants to audit GSTN

**Herculean task for CAG**: Accessing the data at various points — point of manufacture, point of sale etc. —would make the GST audit a complicated and almost impossible task, and will hamper other functions, which would include CAG certification about the share of GST for States.

## Compensation to States:

- ✓ States will be given full compensation for the first five years for any shortfall in revenue because of GST.
- ✓ The States' revenue in 2015-16 will be used as the basis for calculating the compensation, with an assumption of 14% revenue growth in the subsequent five years.
- ✓ The total revenue of a State would be the total of income of States and local bodies from sales tax, value added tax, purchase tax, central sales tax, octroi etc

#### **Basic Information:**

# Goods and Services Tax Network, (GSTN)

- ✓ **GSTN** is a non-Government, private limited company
- ✓ The Government of India holds 24.5% equity in GSTN and all States of the Indian Union, including NCT of Delhi and Puducherry, and the Empowered Committee of State Finance Ministers (EC), together hold another 24.5%. Balance 51% equity is with non-Government financial institutions (private banking firm).
- ✓ **Aim**: The Company has been set up primarily to provide IT infrastructure and services to the Central and State Governments, tax payers and other stakeholders for implementation of the Goods and Services Tax (GST).

## 2. Nasscom sees 'little impact' of H-1B norms

http://www.thehindu.com/business/Industry/h-1b-visa-norms-to-have-little-impact-nasscom/article17815435.ece

## **Key Points:**

- Most IT firms applying for higher-gifted experts.
- The nation's head programming entryway, Nasscom, on Tuesday said the new approach update on H-1B visas by the U.S. "ought to have little effect" on its part organizations.
- As the current year's application procedure for H-1B visas started Monday, the U.S Customs and Immigration Services (USCIS), the organization in charge of choosing the 85,000 H-IB recipients, declared a huge number of measures to take action against organizations that may abuse the program, including more stringent checks at locales where H-1B specialists are utilized.
- Taking note of that part organizations give gifted ability and answers for U.S. organizations, the industry body stated, "The H-1B visa framework exists particularly as a result of the persevering deficiency of exceedingly gifted local IT ability in the U.S.," and its individuals will keep on providing gifted ability and answers for fill that hole and keep U.S. organizations focused internationally.

• It included that the extra proof demonstrating that the occupations themselves are mind boggling or concentrated and require proficient degrees specified by the update has been the accepted prerequisite for a considerable length of time.

# Topic: Environmental Science and Ecology

3. New tree-living crab species found in Kerala

http://www.thehindu.com/news/national/new-tree-living-crab-species-found-in-kerala/article17809088.ece

#### What's in news?

- New species of long legged, tree- dwelling crabs have been discovered by Scientist in Western Ghats of Kerala. First of its kind to offer a record of an arboreal crab — a species that lives in trees.
- The new species named Kani maranjandu after the Kani tribe in Kerala
- These tree dwelling crabs are substantially different from other organisms of the same genus.
- Distinct characteristic features :
  - ✓ Structure of hard upper shell
  - ✓ Male abdominal structure and reproductive parts and diagnostic elongated walking legs.
- Discovery stress the need for conservation of large trees in the degraded forest ecosystems of the Western Ghats.

# Topic: Case Study ( quote as an example)

#### 1. Assets of IAS officer attached

http://www.thehindu.com/news/national/assets-of-ias-officer-attached/article17819110.ece

#### Who?

Babu Lal Agrawal, IAS - Principal Secretary in the Chhattisgarh government.

# Why?

Use of shell companies to launder ill-gotten funds.

#### **Previous Case:**

Central Bureau of Investigation (CBI) arrested Mr. Agrawal,in February along with his brother-in-law and a middleman, for allegedly conspiring to bribe public servants for getting relief in two other cases registered by the agency against him in 2010.

## Issues involved:

- ✓ Corrupt- inflicting profound damages on society
- ✓ Embezzlement
- ✓ Fraud
- ✓ Treason
- ✓ Conflict of interest
- ✓ Probity in governance-Morality and Honesty.

# Prelims worthy factual information:

1. **The Calicut International Kite Festival**- Kerala to host first international kite festival at popular beaches in the city. International Kite Festival will be held in the second week of September, 2017 on Kozhikode beach.

# 2. Uttarayan Festival:

- ✓ International Kite festival held at Ahmadabad, Gujarat.
- ✓ It is the sign for farmers that the sun is back and that harvest season is approaching which is called Makara Sankranti.
- ✓ The idea of flying kites to celebrate Uttrayan was introduced by Muslims from Persia, today regardless of background or beliefs, everyone are welcomed to fly kite in Gujarat in January.
- 3. **Berhampur**: Berhmapur is a municipal corporation located on the eastern coastline of Ganjam district of the Indian state of Odisha in East India. It is one of the oldest and largest cities of Odisha. Nicknamed "**The Silk City**", it is famous for its silk saris, temples and unique culture.
- 4. **Sarin**: Sarin, or GB (G-series, 'B'), is a colorless, odorless liquid, used as a chemical weapon owing to its extreme potency as a nerve agent. It is generally

considered a weapon of mass destruction. Production and stockpiling of sarin was outlawed as of April 1997 by the Chemical Weapons Convention of 1993, and it is classified as a Schedule 1 substance.

It can be lethal even at very low concentrations, where death can occur within one to ten minutes after direct inhalation of a lethal dose, due to suffocation from lung muscle paralysis.

# 5. **Gompas:**

- ✓ Gompas, also known as ling (Wylie: gling), are Buddhist ecclesiastical fortifications of learning, a vihara and a university associated with Tibetan Buddhism and thus common in historical Tibetan regions including parts of China, India, Nepal, Ladakh and Bhutan.
- ✓ Design and interior details vary from region to region; however, all follow a general sacred geometrical mandala design of a central prayer hall containing a murti or thangka, benches for the monks or nuns to engage in prayer or meditation and attached living accommodation. The gömpa or ling may also be accompanied by any number of stupas.
- ✓ 'Gompa' is an imprecise term used by westerners traveling in Tibetan regions to refer to a variety of religious buildings, generally correlating to what might be described as a church but including small temple buildings and other places of worship or religious learning.

# PRACTICE QUESTIONS

- 1. Choose the correct statement with reference to Kani maranjandu which was in news recently.
  - A. It is a tree dwelling crab species.
  - B. It is a terrestrial crab species.
  - C. The species is named after Kani tribe in Kerala.
  - D. Both A and C

Correct Answer: D

Topic: Environmental Science and Ecology.

Level: Factual

Explanation: New species of long legged, tree- dwelling crabs have been discovered by Scientist in Western Ghats of Kerala. First of its kind to offer a record of an arboreal crab — a species that lives in trees.

The new species named Kani maranjandu after the Kani tribe in Kerala

- 2. Consider the following statement with reference to **Uttarayan Festival** which was in news recently
  - A. It is an International Kite festival held at Ahmadabad.

- B. The idea of flying kites to celebrate Uttrayan was introduced by Muslims from Persia.
- C. Both A and B.
- D. Neither A nor B.

Correct Answer: D

Topic: Environmental Science and Ecology.

Level: Factual

Explanation: Uttarayan Festival:

- International Kite festival held at Ahmadabad, Gujarat.
- It is the sign for farmers that the sun is back and that harvest season is approaching which is called Makara Sankranti.
- The idea of flying kites to celebrate Uttrayan was introduced by Muslims from Persia, today regardless of background or beliefs, everyone are welcomed to fly kite in Gujarat in January.
- 3. What do you mean by Masala Bond?
  - A. Masala bonds are bonds issued outside India but denominated in Indian Rupees.
  - B. Masala bonds are bonds issued outside India but denominated in US dollars.
  - C. Masala bonds are bonds issued outside India but denominated in UK dollars.
  - D. None of the above.

Correct Answer: A Topic: Economics Level: Factual

# **Explanation:**

Masala bonds are bonds issued outside India but denominated in Indian Rupees.

- 4. Consider the statements about Organisation for Economic Co-operation and Development(OECD):
  - 1. It is UN agency.
  - 2. It's head quarter is at New York.

Which of the above statements is/are correct?

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

Answer: D

Topic: Organization

Type: Factual

Level: Medium

Explanation:

The Organisation for Economic Co-operation and Development (OECD) is an **intergovernmental** economic organisation with 35 member countries, founded in 1960 to stimulate economic progress and world trade.

So, it is not an UN agency.

It is a forum of countries describing themselves as committed to democracy and the market economy, providing a platform to compare policy experiences, seeking answers to common problems, identify good practices and coordinate domestic and international policies of its members. Most OECD members are high-income economies with a very high Human Development Index (HDI) and are regarded as developed countries.

It's head quarter is at Paris, France.

- 5. Sometimes Base Erosion and Profit Shifting (BEPS) in news. What are they?
  - a) Resolving NPA crisis in banking sector
  - b) Tax avoidance strategy
  - c) Free movement of skilled professional across countries
  - d) Free movement of goods across countries

Answer: B

Topic: Economy

Type: Factual

Level: Medium

# Explantion:

Base erosion and profit shifting (BEPS) is a tax avoidance strategy used by multinational companies, wherein profits are shifted from jurisdictions that have high taxes (such as the United States and many Western European countries) to jurisdictions that have low (or no) taxes (so-called tax havens).

#### G.S.PAPER-1

## **Topic: Societal Issues**

1. Depression among students a huge mental health issue

http://www.thehindu.com/todays-paper/tp-national/tp-andhrapradesh/depression-among-students-a-huge-mental-health-issue/article17835692.ece

#### What's in news?

- Health Information helpline service -Aarogya Vani(104), analysis of call records reveals the following facts:
  - ✓ Out of 1, 15,220 callers sought counseling through helpline, nearly.
  - ✓ Age group 15 and below 63.17% calls were related to memory problems, exam fear and exam.
  - ✓ Age group 16-24 73.09 %( highest percentage)- Seeking counseling for depression owing to career issue. Problems - family, love failure, memory, exam fear and exam failure.

# NIMHANS survey related to depression among student(highlights):

- ✓ Depression is more among male students.
- ✓ Highest in the age group of 18 to 22
- ✓ Highest among those in urban areas (1.7%) than compared to rural areas (1%)
- ✓ One-third of the students with severe depression are likely to have suicidal ideations.

## Key highlights:

- ✓ Depression among the students is being increasingly recognized as a major health issue.
- ✓ The burden of depression is found to be on the rise over the years due to greater recognition, awareness and media influence.

### Reasons for increase in depression:

- ✓ High expectations of parents
- ✓ Educational and exam related stress and anxiety.
- ✓ Peer group pressure and stress to perform well.
- ✓ Growing Nuclear families with lack of support.



#### G.S.PAPER-2

Topic: Statutory, Regulatory and various quasi-judicial bodies.

#### 1. Rail regulator gets green light

http://www.thehindu.com/todays-paper/rail-regulator-gets-greenlight/article17835702.ece

#### What's in news?

• The Centre cleared a proposal for setting up an **independent rail** regulator- Rail Development Authority.

### Responsibility of the new Regulator

- ✓ Recommending passenger fares
- ✓ Setting performance standards for rail operations
- ✓ Creating level playing policy for private sector participation.
- ✓ Frame principles for social service obligation
- ✓ Fix efficiency standards and resolve disputes related to future concession agreements
- ✓ Collect, analyse and disseminate information and statistics concerning the rail sector
- ✓ RDA to recommend on the above said matters to the Ministry of Railways; however its recommendations are not binding. Ministry to take a final call on freight charges and passenger fares.

### Headquarter- Delhi

### How creation of RDA going to impact the sector?

- ✓ Improve services offered to passengers
- ✓ Enhance transparency and accountability- Central government has been fixing the fares mostly based on political considerations
- ✓ Boost investment in railway sector
- ✓ Provide comfort to investor- by creating level playing field for private players.

# Committees that pitched in for creation of rail regulator in India are:

- ✓ Dr. Bibek Debroy Committee on Mobilisation of Resources for Major Railway Projects and Restructuring of Railway Ministry in 2015
- ✓ The National Transport Development Policy Committee (NTDPC) in 2014
- ✓ Expert Group under the Chairmanship of Dr. Rakesh Mohan in 2001

## Topic: Issues related to Health

# 2. Bihar, Jharkhand children 'undernourished,' says NGO

http://www.thehindu.com/news/national/other-states/bihar-jharkhand-children-undernourished-says-ngo/article17834726.ece

#### What's in news?

- Trend analysis of National Family Health Survey-4 Data by NGO,
   Child Rights and You(CRY):
  - ✓ **NFHS-4**: Only 7.4% and 7.2% of children in Bihar and Jharkhand receive adequate diet. In Tamil Nadu it is 31% (TN is implementing Universal Public Distribution System).
  - ✓ Two-thirds of children under the age of three years in these two States are not breastfed within the first hour of birth.
  - ✓ Nutritional and health status of children found in Bihar and Jharkhand- "Critically low", compared to National Standards.
  - ✓ One-third of the total births in the two States continue to remain home births.

#### ✓ Anaemia:

- ➤ **Acute anaemia:** two-thirds of children aged 6-59 months were suffering from acute anaemia.
- ➤ High percentage of anaemic pregnant women in the agegroup of 15-49 years.

## ✓ Data on maternal health –

Only 9% of pregnant women in Bihar and 15% of pregnant women in Jharkhand consumed iron and folic acid supplements for hundred days or more during pregnancy.

#### ✓ Positive actions taken:

➤ Both Bihar and Jharkhand have done well in several child health and nutrition indicators such as institutional delivery, immunisation, and treatment of critical childhood diseases.

Comparative analysis between NFHS-4 and NFHS-3 data suggests that institutional deliveries were less than 20% in Bihar and Jharkhand a decade ago (2005-06). They have now risen to around 60% of total births.

### √ Key highlights of report:

- > Inadequate provision of quality antenatal care.
- States' failure to address the special nutritional requirements of expecting and lactating mothers
- Child malnutrition is an irreversible phenomenon in the lives of children. Its effects are felt through adolescent and adult life.

# **Topic: Polity**

### 3. WhatsApp case for Constitution Bench

http://www.thehindu.com/todays-paper/tp-national/whatsapp-case-for-constitution-bench/article17835593.ece

#### What's in news?

- **Background information:** 2016 WhatsApp contact with Facebook- to give access to information (to calls, photographs, texts, videos and documents shared by users) and personal details shared by millions of its users to Facebook.
- A case has been filed before Supreme Court regarding Violation of Privacy and free speech.
- Chief Justice of India J.S. Khehar has constituted a Constitution Bench to proceed with the case.

#### Constitution Bench to decide:

- ➤ Violation of Right to Privacy under Fundamental right Article 21 of the constitution.
- Right of free speech under Article 19 (1) (a).

# Previous judgment of Supreme Court regarding Violation of Privacy-

- ➤ 1954 M.P. Sharma's case (Eight-judges Bench)
- ➤ Kharak Singh v. State of Uttar Pradesh case (Six-judges Bench) Judgment of both cases: Rejected the existence of privacy as a guaranteed right under Article 21 of the Constitution.

### 4. BC Commission set to get constitutional status

http://www.thehindu.com/news/national/bc-commission-set-to-get-constitutional-status/article17834979.ece

### What's in news?

- Constitution (123rd Amendment) Bill: introduced in Lok Sabha to accord constitutional status to the Backward Classes commission.
- **Objective of the bill:** "In order to safeguard the interests of the socially and educationally backward classes more effectively, it is proposed to create a National Commission for Backward Classes with constitutional status at par with the National Commission for Scheduled Castes and the National Commission for Scheduled Tribes"

### Mandate of the body:

- ➤ The proposed commission will have a chairperson, vicechairperson and three other members.
- > It will hear grievances of socially and educationally backward classes.

## National Commission for backward Classes:

✓ A statutory body under the Ministry of Social Justice and Empowerment.

✓ It was constituted pursuant to the provisions of the National Commission for Backward Classes Act, 1993

#### **✓** Functions:

- Examining the requests for inclusion of any class of citizens as a backward class
- ➤ Hear complaints of over-inclusion or under-inclusion of any backward class in the existing quota
- Advise the Central government with regard to matter relating to OBC's.

# 5. Cong. seeks privilege motion against Jaitley

http://www.thehindu.com/news/national/cong-seeks-privilege-motionagainst-jaitley/article17835015.ece

## What is a privilege motion?

- A privilege motion is a notice by any member of either House of a state legislature or Parliament, against anyone who are accused of breach of privilege.
- Parliamentary privileges are certain rights and immunities enjoyed by MPs, MLAs and MLCs, individually and collectively, so that they can effectively discharge their functions.
- When any of these rights and immunities is disregarded, the offence is called a breach of privilege and is punishable under law of Parliament or the state legislature. Each House also claims the right to punish as contempt actions which, while not breach of any specific privilege, are offences against its authority and dignity.

## **Topic: Bilateral relations**

## 6. U.K., India unveil joint 'green' fund

http://www.thehindu.com/todays-paper/tp-business/uk-india-unveil-joint-green-fund/article17835536.ece

#### What's in news?

- **Joint Green Growth Equity Fund** India and the U.K. announced setting up of a joint Green Fund .
- Fund to raise about £500 million to fund infrastructure projects.
- Main purpose: Help India to enhance its inclusive growth strategies by boosting investment into Green infrastructure.

#### G.S.PAPER-3

## **Topic: Environmental Science and Ecology**

## 1. Taj Mahal changing colour, mud therapy being used: Govt

http://www.livemint.com/Science/ruAipYkK9WWkYaSQqwgVRI/Taj-Mahal-changing-colour-mud-therapy-being-used-Govt.html

#### What's in news?

- Multani mitti mud therapy is being used on Taj Mahal inorder to preserve the white color of the marbles.
- Marbles changing its color and turning yellow due to
  - ✓ Insects- Swarms of insects breeding in polluted river near the Taj Mahal are threatening the intricate marble inlay works ,by leaving green and black patches of waste on its walls.
  - ✓ Alarming pollution level

#### **Basic Information:**

- National Environmental Engineering Research Institute:
  - ✓ Research institute created and funded by Government of India.
  - ✓ It was established in Nagpur in 1958 with focus on water supply, sewage disposal, and communicable diseases and to some extent on industrial pollution and occupational diseases found common in post-independent India.
  - ✓ NEERI is a pioneer laboratory in the field of environmental science and engineering and part of Council of Scientific and Industrial Research (CSIR).
  - ✓ NEERI falls under the **Ministry of Science and Technology** (India) of central government.

#### **Topic: Economy**

# 2. 'Liquor ban to hit tourist arrivals, forex earnings'

http://www.thehindu.com/todays-paper/tp-business/liquor-ban-to-hit-tourist-arrivals-forex-earnings/article17835555.ece

## What's in news?

- **Background Information:** Supreme Court recently ordered to ban the sale of liquor within 500 metres of highway.
- Impacts on economy:
  - ✓ Job loss
  - ✓ Foreign tourist arrival drastically reduces leading to low foreign exchange earnings.
  - ✓ Collection of direct and indirect taxes and levies (accrue) to both the central and state governments decreases.

• **Way forward:** Instead of banning the sale of liquor, effective enforcement through effective policing to prevent drunken driving is the need of the hour.

## 3. Steps on liquidity will be in focus

http://www.thehindu.com/business/Economy/excess-liquidity-may-be-a-concern/article17834510.ece

#### What's in news?

- It is likely that the RBI will take measures to lessen surplus liquidity, say experts.
- With the national bank generally anticipated that would keep financing costs unaltered in the new financial year's first bimonthly fiscal strategy audit on Thursday, markets are definitely holding up to perceive what steps the RBI may take to handle surplus liquidity in the managing an account framework.

#### **Basic Information:**

**Cash Reserve Ratio** (CRR) is a specified minimum fraction of the total deposits of customers, which commercial banks have to hold as reserves either in cash or as deposits with the central bank.

**Statutory liquidity ratio** (SLR) is the Indian government term for reserve requirement that the commercial banks in India require to maintain in the form of gold, government approved securities before providing credit to the customers.

Statutory Liquidity Ratio is determined by Reserve Bank of India maintained by banks in order to control the expansion of bank credit.

The SLR is determined by a percentage of total demand and time liabilities. Time Liabilities refer to the liabilities which the commercial banks are liable to pay to the customers after a certain period mutually agreed upon, and demand liabilities are such deposits of the customers which are payable on demand. An example of time liability is a six month fixed deposit which is not payable on demand but only after six months. An example of demand liability is a deposit maintained in saving account or current account that is payable on demand through a withdrawal form such as a cheque.

**Repo rate** is the rate at which the central bank of a country (Reserve Bank of India in case of India) lends money to commercial banks in the event of any shortfall of funds.

In the event of inflation, central banks increase repo rate as this acts as a disincentive for banks to borrow from the central bank. This ultimately reduces the money supply in the economy and thus helps in arresting inflation.

The central bank takes the contrary position in the event of a fall in inflationary pressures.

**Reverse repo rate** is the rate at which the central bank of a country (Reserve Bank of India in case of India) borrows money from commercial banks within the country. It is a monetary policy instrument which can be used to control the money supply in the country.

Repo and reverse repo rates form a part of the **liquidity adjustment facility**.

**Marginal standing facility (MSF)** is a window for banks to borrow from the Reserve Bank of India in an emergency situation when inter-bank liquidity dries up completely.

Banks borrow from the central bank by pledging government securities at a rate higher than the repo rate under liquidity adjustment facility or LAF in short. The MSF rate is pegged 100 basis points or a percentage point above the repo rate. Under MSF, banks can borrow funds up to one percentage of their net demand and time liabilities (NDTL).

**Bank rate** is the rate charged by the central bank for lending funds to commercial banks.

Bank rates influence lending rates of commercial banks. Higher bank rate will translate to higher lending rates by the banks. In order to curb liquidity, the central bank can resort to raising the bank rate and vice versa.

**Market Stabilization scheme (MSS)** is a monetary policy intervention by the RBI to withdraw excess liquidity (or money supply) by selling government securities in the economy. The MSS was introduced in April 2004. Main thing about MSS is that it is used to withdraw excess liquidity or money from the system by selling government bonds.

**Open market operations** (OMO) refers to the buying and selling of government securities in the open market in order to expand or contract the amount of money in the banking system, facilitated by the RBI.

Present Key Policy Rates:

Policy Repo Rate : 6.25%

Reverse Repo Rate : 5.75%

Marginal Standing Facility Rate : 6.75%

Bank Rate : 6.75%

#### ARTICLE IN NEWS

# Article 368. Power of Parliament to amend the Constitution and procedure therefor

- (1) Notwithstanding anything in this Constitution, Parliament may in exercise of its constituent power amend by way of addition, variation or repeal any provision of this Constitution in accordance with the procedure laid down in this article
- (2) An amendment of this Constitution may be initiated only by the introduction of a Bill for the purpose in either House of Parliament, and when the Bill is passed in each House by a majority of the total membership of that House a majority of not less than two-thirds of the members of that House present and voting it shall be presented to the President who shall give his assent to the Bill and thereupon the Constitution shall stand amended in accordance with the terms of the Bill: Provided that if such amendment seeks to make any change in
- (a) Article 54, Article 55, Article 73, Article 162 or Article 241, or
- (b) Chapter IV of Part V, Chapter V of Part VI, or Chapter I of Part XI, or
- (c) any of the Lists in the Seventh Schedule, or
- (d) the representation of States in Parliament, or
- (e) the provisions of this article, the amendment shall also require to be ratified by the Legislature of not less than one half of the States by resolution to that effect passed by those Legislatures before the Bill making provision for such amendment is presented to the President for assent
- (3) Nothing in Article 13 shall apply to any amendment made under this article
- (4) No amendment of this Constitution (including the provisions of Part III) made or purporting to have been made under this article whether before or after the commencement of Section 55 of the Constitution (Forty second Amendment) Act, 1976 shall be called in question in any court on any ground
- (5) For the removal of doubts, it is hereby declared that there shall be no limitation whatever on the constituent power of Parliament to amend by way of addition, variation or repeal the provisions of this Constitution under this article PART XXI TEMPORARY, TRANSITIONAL AND SPECIAL PROVISIONS

## 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

# Article 105. Powers, privileges, etc of the Houses of Parliament and of the members and committees thereof

- (1) Subject to the provisions of this constitution and the rules and standing orders regulating the procedure of Parliament, there shall be freedom of speech in Parliament
- (2) No member of Parliament shall be liable to any proceedings in any court in respect of anything said or any vote given by him in Parliament or any committee thereof, and no person shall be so liable in respect of the publication by or under the authority of either House of Parliament of any report, paper, votes or proceedings
- (3) In other respects, the powers, privileges and immunities of each House of Parliament, and of the members and the committees of each House, shall be such as may from time to time be defined by Parliament by law, and, until so defined shall be those of that House and of its members and committees immediately before the coming into force of Section 15 of the Constitution (Forty fourth Amendment) Act 1978
- (4) The provisions of clauses (1), (2) and (3) shall apply in relation to persons who by virtue of this constitution have the right to speak in, and otherwise to take part in the proceedings of, a House of Parliament or any committee thereof as they apply in relation to members of Parliament

#### Prelims related factual information:

#### 1. McMahon Line:

- ✓ The McMahon Line is a line proposed by MacMahon in the Simla Accord which was considered invalid by both Tibetans and Chinese government.
- ✓ It is the effective boundary between China and India, although its legal status is disputed by the Chinese government.
- ✓ The line is named after Sir Henry McMahon, foreign secretary of the British-run Government of India and the chief negotiator of the convention at SimlaChina
- ✓ China rejects the Simla Accord, contending that the Tibetan government was not sovereign and therefore did not have the power to conclude treaties

## 2. Simla Accord (1914):

- ✓ The Simla Accord, or the Convention Between Great Britain, China, and Tibet, [in] Simla, was a treaty concerning the status of Tibet negotiated by representatives of the Republic of China, Tibet and the United Kingdom in Simla in 1913 and 1914.
- ✓ The Accord provided that Tibet would be divided into "Outer Tibet" and "Inner Tibet". Outer Tibet, would "remain in the hands of the Tibetan Government at Lhasa under Chinese suzerainty, but China would not interfere in its administration. "Inner Tibet", would be under the jurisdiction of the Chinese government.
- ✓ The Accord with its annexes also defines the boundary between Tibet and China proper and between Tibet and British India (the latter became known as the McMahon Line).
- ✓ China rejected the Accord . The British and Tibetan then attached a note denying China any privileges under the Accord and sealed it as a bilateral agreement the same day.
- ✓ The British records show that there are conditions for the Tibetan government to accept the new border in 1914, the condition was that China must accept the Simla Convention, since the British was not able to get an acceptance form China, Tibetans considered the MacMahon line invalid.

## 3. Kyasanur Forest Disease (KFD) or monkey fever:

- ✓ Kyasanur Forest disease (KFD) is a tick-borne viral hemorrhagic fever endemic to South Asia.
- ✓ The disease is caused by a virus
- ✓ The disease was first reported from Kyasanur Forest of Karnataka in India in March 1957. The disease first manifested as an **epizootic** (a disease event in a nonhuman animal population) outbreak among

- monkeys killing several of them in the year 1957. Hence the disease is also locally known as Monkey Disease or Monkey Fever
- ✓ Reservoir hosts for the disease: porcupines, rats, squirrels, mice and shrews.
- ✓ The vector for disease transmission is Haemaphysalis spinigera, a forest tick. Humans contract infection from the bite of the tick.

# √ Symptoms of the disease

- ➤ High fever with frontal headaches
- ➤ Haemorrhagic symptoms, such as bleeding from the nasal cavity, throat, and gums, as well as gastrointestinal bleeding.

# 4. The theme for World Health Day on April 7 this year is 'Depression: Let's Talk'.

#### 5. BCIM Economic Corridor:

- ✓ The Bangladesh, China, India and Myanmar Economic Corridor is an initiative conceptualised for significant gains through sub-regional economic cooperation within the BCIM.
- ✓ The multi-modal corridor will be the first expressway between India and China and will pass through Myanmar and Bangladesh.

# ✓ Advantages:

- Greater market access for goods, services and energy
- ➤ Elimination of non-tariff barriers, better trade facilitation, investment in infrastructure development, joint exploration and development of mineral, water, and other natural resources, development of value and supply chains based on comparative advantages, by translating comparative advantages into competitive advantages, and through closer people to people contact.
- ✓ The proposed corridor will cover 1.65 million square kilometres, encompassing an estimated 440 million people in China's Yunnan province, Bangladesh, Myanmar, and West Bengal in Eastern India through the combination of road, rail, water and air linkages in the region.
- ✓ This interconnectedness would facilitate the cross-border flow of people and goods, minimize overland trade obstacles, ensure greater market access and increase multilateral trade.

## **PRACTICE QUESTIONS**

- 1. Identify the correct statement with reference to Kyasanur Forest Disease which was in news recently.
  - A. It is a viral disease in monkeys
  - B. It is a bacterial disease in monkeys
  - C. It is a fungal disease in monkeys
  - D. None of the above

Correct Answer: A Topic: Current Affair Level: Moderate Explanation:

Kyasanur Forest Disease (KFD) or monkey fever:

- ✓ Kyasanur Forest disease (KFD) is a tick-borne viral hemorrhagic fever endemic to South Asia.
- ✓ The disease is caused by a virus
- ✓ The disease was first reported from Kyasanur Forest of Karnataka in India in March 1957. The disease first manifested as an **epizootic** (a disease event in a nonhuman animal population) outbreak among monkeys killing several of them in the year 1957. Hence the disease is also locally known as Monkey Disease or Monkey Fever
- ✓ Reservoir hosts for the disease: porcupines, rats, squirrels, mice and shrews.
- ✓ The vector for disease transmission is Haemaphysalis spinigera, a forest tick. Humans contract infection from the bite of the tick.
- 2. Recently India announced constitution of new Joint Green Growth Equity Fund along with?
  - A. United Kingdom
  - B. Israel
  - C. Singapore
  - D. Bangladesh

Correct Answer: A Topic: Current Affair Level: Moderate

Explanation: U.K., India unveil joint 'green' fund

- 3. Constitutional 123<sup>rd</sup> amendment bill seeks to provide
  - A. Constitutional Status to Backward Classes Commission
  - B. Constitutional Status to National Women's Commission
  - C. Constitutional Status to University Grants Commission

## D. None of the above

Correct Answer: A

Topic: Polity Level: Moderate Explanation:

- Constitution (123rd Amendment) Bill: introduced in Lok Sabha to accord constitutional status to the Backward Classes commission.
- 4. National Environmental Engineering Research Institute falls under
  - A. Ministry of Environment and Forest
  - B. Ministry of Science and Technology
  - C. Ministry of Human Resource and Development
  - D. None of the above

Correct Answer: B Topic: Current Affair Level: Moderate Explanation:

NEERI falls under the **Ministry of Science and Technology** (India) of central government.

- 5. The rate at which the central bank of a country (Reserve Bank of India in case of India) borrows money from commercial banks within the country is called:
  - a) Repo Rate
  - b) Reverse repo rate
  - c) Bank Rate
  - d) Marginal Standing Facility Rate

Answer: B Topic: Banking Type: Conceptual Level: Medium

**Reverse repo rate** is the rate at which the central bank of a country (Reserve Bank of India in case of India) borrows money from commercial banks within the country. It is a monetary policy instrument which can be used to control the money supply in the country.

- 6. To keep the SLR, banks have to maintain the deposits in which of the following forms?
  - 1. Gold
  - 2. Government approved securities
  - a) 1 only

b) 2 only

c) Both 1 and 2

d) None

Answer: C

Topic : Banking Type : Factual Level : Medium

**Statutory liquidity ratio** (SLR) is the Indian government term for reserve requirement that the commercial banks in India require to maintain in the form of gold, government approved securities before providing credit to the customers.

#### G.S.PAPER-1

**Topic: Societal Issue** 

#### 1. Breaking the silence on depression

http://www.thehindu.com/news/national/breaking-the-silence-on-depression/article17855730.ece

#### What's in news?

- World Health Day theme "Depression: Let's Talk".
- W.H.O estimates:
  - ✓ 300 million globally living with depression
  - ✓ Depression accounts for two-thirds of global suicides that occur in low- and middle-income countries such as India.
  - ✓ 5 crore Indians are suffering from depression
  - ✓ Suicide is the second most common cause of death among young people worldwide
- Depression is the leading cause of ill health and disability.
- Lack of support for people with mental disorders, coupled with a fear of stigma, prevents many from accessing the treatment they need to lead a healthy and productive life.
- Depression has a 40-60% chance of dying prematurely owing to physical health problems.

# How the recently passed Mental Health Care Bill- fight against depression?

- **Destigmatising psychological disorders** Act recognizes an attempt to suicide as an act committed under severe mental stress.
- **Rights based approach** Rights of people with mental health problems to lead a life with dignity and access to community-based care.

#### G.S.PAPER-2

**Topic: Polity** 

# 1. Supreme Court proposes joint trial of Babri cases

http://www.thehindu.com/todays-paper/sc-proposes-joint-trial-of-babricases/article17857223.ece

## What's in news?

 Case pertaining to Demolition of Babri Masjid mosque on December 6,1992-16th century mosque in Ayodhya.

#### An unfettered power In calling for a joint trial of separate cases in the Babri Masjid issue, the Supreme Court used its extraordinary powers under Art. 142 Article 142: The Supreme law to the contrary Court may pass such decree or order as is necessary for doing complete justice in any cause or demolition of the disputed matter pending before it structure on December 6, 1992 The recent highway liquor The first involved unnamed ban was imposed by the 'karsevaks', whose trial is taking Supreme Court under Article 142 place in a Lucknow court The second set of cases in a In 2011, a bench of Justice Rae Bareli court relates A.K. Ganguly and Justice Deepak Verma had said to the VVIPs accused of "inflammatory speeches", in which on Article 142:"...no fetter is imposed on the CBI is pressing the court's jurisdiction for restoration of "conspiracy" charge express provision of the against the accused

- "Justice delayed is justice denied"- 25 years passed on, still the courts are testifying the witnesses.
- There are two cases that are filed in two different courts pertaining to the issue of demolition one in Lucknow and the other in Raebareli.
- Supreme Court invoked upon Article 142 and ordered a joint trail of these two cases in a Lucknow court i.e., the transfer of pending trail in a Raebareli magistrate court and club it with the criminal proceedings in the Lucknow CBI court

# **Background Information:**

# The Babri Masjid:

- It was a mosque in Ayodhya, India. Located in Faizabad district, it was one of the largest mosques in the Uttar Pradesh state.
- According to the mosque's inscriptions, it was built in 1528–29 CE by Mir Baqi, on orders of the Mughal emperor Babur (The mosque was located on a hill known as Ramkot ("Rama's fort").
- According to a section of Hindus, the Mughals destroyed a structure marking the birthplace of Rama (Ram Janmabhoomi) to build the mosque, a claim denied by the Muslims.
- **Ayodhya dispute**: The political, historical and socio-religious debate over the history of the site and whether a previous temple was demolished or modified to create the mosque, is known as the Ayodhya dispute.
- Starting in the 19th century, there were several conflicts and court disputes between Hindus and Muslims over the mosque.
- On 6 December 1992, the demolition of the Babri Masjid by Hindu nationalist groups triggered riots all over India, leading to around 2,000 deaths.

## 2. 'Use restraint in using Article 142'

http://www.thehindu.com/news/national/use-restraint-in-using-article-142/article17856362.ece

### What's in news?

- Senior advocate K.K. Venugopal warned Supreme Court to be restraint while using Article 142.
- Recent incidence of using Article 142 by Supreme Court and its negative consequences as per the senior advocate:
  - ➤ The highway liquor ban which involves the issue of **Right to**livelihood which is a part of **Right to** life as per Supreme Court judgement in **Olga Tellis v. Bombay Municipal Corporation**case.
  - > Supreme Court ordered a joint trial of the two Babri Masjid demolition cases pending for the past 25 years. The joint trial now

would disrupt existing trial in the two cases and the rights of the accused.

• **As per the advocate**: use of Article 142 should be in accordance with law and due process of law as guaranteed in Article 21 and Article 142 is not a source of unlimited power and it should made use of with self- restraint.

## 3. Centre declares Kerala drought-hit

http://www.thehindu.com/news/national/kerala/centre-declares-kerala-drought-hit/article17852546.ece

#### **Basic Information:**

# What is a draught?

Drought is a natural, recurring climatic feature which stems from lack of rainfall over an extended period of time.

## **Drought Management Manual:**

According to the drought management manual, a drought is assessed on the availability of 5 parameters

- Drinking water
- Irrigation water
- Fodder
- Food grains
- The energy sector requirement

#### **Mitigation Measures:**

- Creating employment opportunities: Using MGNREGS to provide immediate employment to drought-affected people
   Shortcomes: In some states, the MGNREGS suffers from huge pay delays, making people unwilling to take up the work, majority villagers do not have job cards
- **Distribution of food grains through PDS:** The PDS mechanism should be strengthened to provide food and fodder as a measure to sustain the rural economy.
  - **Short comes:** the PDS does not function properly.
- **Creating Environmental balance:** The government should initiate actions to recharge the groundwater table by building check dams and providing pipeline water and other irrigation facilities.
  - **Short comes**: drought-affected regions of MP face a huge drinking water crisis, In UP they have not initiated planned irrigation in drought-affected areas
- **Loan Waivers:** the government should either waive off or defer farmer loans and arrange for crop loss compensation
  - **Short comes:** In most States, the crop loss compensation has not reached the farmers, complain of gross underestimation of losses in the

calculation of compensation amounts ,inflationary pressures are not taken into account

**Way Forward:** The effective preparedness and prevention of the crisis in agriculture is the foremost important task before the Government.

- **Short term goals:** additional allocation of food grains, establishing cattle camps water conservation measures, water budgeting ,Proper health advisories and ensuring availability of emergency medical services , movement of water and fodder from surplus areas (States) to deficit.
- **Long term plan :** Contingency crop plan through effective agro advisory services , Monitoring over exploitation of ground water for non agricultural and nondrinking purposes (i.e. industrial /commercial / entertainment purposes), alternative employment generation programmes, enhancing PDS allocations, import of food grains to meet the gap between demand and supply, checking up of inflation etc

## 4. 'Dry' Gujarat in a fix over SC order

http://www.thehindu.com/news/national/dry-gujarat-in-a-fix-over-sc-order/article17856864.ece

#### Practice in Gujarath:

- Sale and consumption of liquor is prohibited and highly regulated one.
- Except those holding permits issued by the state health department, no one can consume liquor in the State.
- There are more than 50 licensed liquor shops, mostly in resorts and luxury hotels. These cater to permit holders and to tourists who get temporary permits.

**Way forward:** This practice can be imitated in other states as well.

### **Topics: Bilateral Relations**

5. India, Nepal agree to talk on some crucial bilateral pacts

http://www.financialexpress.com/india-news/india-nepal-agree-to-talk-on-some-crucial-bilateral-pacts/618349/

# Highlights of third meeting of the India-Nepal Eminent Persons' Group:

- Three key focus areas
  - ✓ Nepal–India cooperation in water resources
  - ✓ Ways to reducing Nepal's huge trade deficit with India
  - ✓ 1950 Treaty of Peace and Frienship- treaty between Nepal and India for establishing a close strategic relationship

#### **Basic Information:**

# 1950 Treaty of Peace and Friendship:

- Bilateral treaty between Nepal and India establishing a close strategic relationship between the two South Asian neighbours.
- The treaty was signed at Kathmandu
- The treaty allows free movement of people and goods between the two nations and a close relationship and collaboration on matters of defense and foreign policy.
- After an abortive attempt in 1952 of the Communist Party of Nepal to seize power with Chinese backing, India and Nepal stepped up military and intelligence cooperation under treaty provisions, and India sent a military mission to Nepal.

# What is Eminent Persons Group on Nepal-India Relations?

- The Eminent Persons Group on Nepal-India Relations (EPG-NIR) is a joint mechanism consisting experts and intellectuals from Nepal and India
- It provides necessary suggestions to update all existing bilateral treaties and agreements.

## Topic: Health issue

#### 6. Smoking causes one in 10 deaths worldwide: study

http://www.thehindu.com/todays-paper/tp-national/smoking-causes-one-in-10-deaths-worldwide-study/article17857391.ece

#### What's in news?

- Highlights of Global Burden of Disease (GBD) report published in medical journal The Lancet.
  - ✓ Smoking caused one in ten deaths worldwide in 2015
  - ✓ China, India, the United States and Russia accounted for half of the deaths (52.2%) related to smoking.
  - ✓ Leading countries with male smokers- China, India, and Indonesia.
  - ✓ Leading countries with female smokers- The U.S., China and India
  - ✓ India has 11·2% of the world's total smokers.
  - ✓ Smoking was rated as a bigger burden on health moving from the third to the second highest cause of disability.
  - ✓ Pakistan, Panama and India stand out as three countries that have implemented a large number of tobacco control policies over the past decade

#### **Basic Information:**

The World Health Organization Framework Convention on Tobacco Control (WHO FCTC):

Objective: "To protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke" by enacting a set of universal standards stating the dangers of tobacco and limiting its use in all forms worldwide.

#### G.S.PAPER-3

**Topic: Economy** 

#### 1. RBI chief hits out at farm loan waiver

http://www.thehindu.com/news/national/rbi-chief-hits-out-at-farm-loan-waiver/article17856413.ece

## What's in news?

- Recently Uttar Pradesh waived farmers loan worth ₹36,359 crore.
- Reserve Bank of India Governor Urjit Patel, points out the negative impacts of such waivers on the economy as follows:
  - ✓ Transfer from tax payers to borrowers- tax evasion and tax avoidance might crop up.
  - ✓ Intergenerational parity Increase in government borrowing which implies higher burden of tax on future generation.
  - ✓ Lower yield on government bonds
  - ✓ Crowding out of private borrowers: higher government borrowing can lead to an increase in cost of borrowing for others.
  - ✓ Waiver schemes distort the credit culture.
  - ✓ Fall in credit discipline because the people who get the waiver have expectations of future waivers as well.

**Counter argument:** The one who supports loan waiver looks into issues involving

- √ Farmers welfare
- ✓ Incidence of higher rates of suicides among farmers
- ✓ Price crash
- ✓ Lack of other employment opportunities and various other reasons to support the waiver schemes.

#### Way forwards:

We should try to build a National consensus on loan waiver schemes so that promises such as loan waivers are not made during elections.

## 2. RBI holds policy rate, raises reverse repo rate

http://www.thehindu.com/business/rbi-holds-policy-rate-raises-reverse-repo-rate/article17855715.ece

#### What's in news?

- RBI's First Bi-monthly policy review 2017-18
  - ✓ Repo Rate-6.25%
  - ✓ Reverse Repo Rate- 6%
- Standing Deposit Facility:
  - ✓ RBI had proposed a standing deposit facility to the government in November 2015, approval for which was still awaited.
  - ✓ SDF is a mechanism to drain surplus cash at a rate lower than the repo rate without the need for any collateral.

# Topic: Science and Technology

## 3. Centre kicks off programme on cyber physical systems

http://www.thehindu.com/news/national/centre-kicks-off-programme-on-cyber-physical-systems/article17855617.ece

#### What's in news?

- Department of Science and Technology (DST) has initiated a Cyber Physical Systems (CPS) programme.
- In India this particular area is still in nascent stage of development.
- At first, to take root in some of the Indian Institutes of Technology (IITs).
- Financial outlay of ₹100 crore has been earmarked for the project in the current financial year.

#### What is CPS?

 A cyber-physical system (CPS) is a mechanism controlled or monitored by computer-based algorithms, tightly integrated with the internet and its users

## **Applications**

- Self-driven cars
- Smart grids (where electricity is optimally distributed on the basis of calculations in real time by micro-processors)
- Autonomous unmanned vehicles
- Aircraft navigation systems

#### ARTICLE IN NEWS

# 1. Article 142. Enforcement of decrees and orders of Supreme Court and unless as to discovery, etc

- (1) The Supreme Court in the exercise of its jurisdiction may pass such decree or make such order as is necessary for doing complete justice in any cause or matter pending before it, and any decree so passed or orders so made shall be enforceable throughout the territory of India in such manner as may be prescribed by or under any law made by Parliament and, until provision in that behalf is so made, in such manner as the President may by order prescribe
- (2) Subject to the provisions of any law made in this behalf by Parliament, the Supreme Court shall, as respects the whole of the territory of India, have all and every power to make any order for the purpose of securing the attendance of any person, the discovery or production of any documents, or the investigation or punishment of any contempt of itself

#### Prelims related factual information:

## 1. Doctrine of PARI MATERIA:

- A designation applied to statutes or general laws that were enacted at different times but pertain to the same subject or object.
- Statutes in pari materia must be interpreted in light of each other since they have a common purpose for comparable events or items.

## Example: J.K. Steal Ltd. v. Union of India and Ors,

The Hon'ble Supreme Court, while considering parimateria provisions of Central Excises and Salt Act, held that Acts being in parimateria must be taken together as forming one code and as interpreting and enforcing each other.

## 2. National Disaster Response Fund

- Fund managed by the Central Government for meeting the expenses for emergency response, relief and rehabilitation due to any threatening disaster situation or disaster.
- NDRF is constituted to supplement the funds of the State Disaster Response Funds (SDRF) of the states to facilitate immediate relief in case of calamities of a severe nature
- In the event of a disaster of 'a severe nature', in which the funds needed for relief operations exceeded the balances in the SDRF account, additional assistance would be provided from the NDRF after following prescribed procedures.

- The financial assistance from SDRF/NDRF is for providing immediate relief and is not compensation for loss/damage to properties /crops.
- NDRF amount can be spent only towards meeting the expenses for emergency response, relief and rehabilitation. For projects exclusively for the purpose of mitigation, i.e, measures aimed at reducing the risk, impact or effect of a disaster or threatening disaster situation.
- NDRF is financed through the levy of a cess on certain items, chargeable to excise and customs duty.
- The National Executive Committee (NEC) of the National Disaster Management Authority takes decisions on the expenses from National Disaster Response Fund.
- The NEC is composed of Secretary level officers of the Government of India in the Ministries of home, agriculture, atomic energy, defence, drinking water supply, environment and forests, finance (expenditure), health, power, rural development, science and technology, space, telecommunication, urban development, and water resources, with the Home secretary serving as the Chairperson, ex officio. (Don't need to remember, have a vague idea).

# 3. Internet of Things:

- The concept of basically connecting any device with an on and off switch to the Internet (and/or to each other).
- This includes everything from cellphones, coffee makers, washing machines, headphones, lamps, wearable devices and almost anything else you can think of. This also applies to components of machines, for example a jet engine of an airplane or the drill of an oil rig.
- The IoT is a giant network of connected "things" (which also includes people).
- The relationship will be between people-people, people-things, and things-things.

### 4. Various Regulatory Bodies in India having Statutory support

- Telecom Regulatory Authority of India,
- Airports Economic Regulatory Authority of India,
- Insurance Regulatory Development Authority,
- Central Electricity Regulatory Commission,
- Tariff Authority of Major Ports and
- Pension Fund Regulatory and Development Authority.

# 5. Lapland (Finland): Lapland is the largest and northernmost region of Finland.

**6. Base Effect:** The Base effect relates to inflation in the corresponding period of the previous year, if the inflation rate was too low in the corresponding period of the previous year, even a smaller rise in the Price Index will arithmetically give a high rate of inflation now. On the other hand, if the price index had risen at a high rate in the corresponding period of the previous year and recorded high inflation rate, a similar absolute increase in the Price index now will show a lower inflation rate now.

# Example:

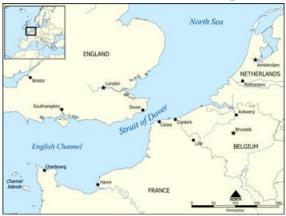
Year	Salary	Increase	% increase
2011	10,000	a=	S=0
2012	15,000	5,000	50%
2013	20,000	5,000	33%

# **PRACTICE QUESTIONS**

- **1.** Strait of Dover is often seen in news, where it is located?
  - A. Between Continent Europe and Britain
  - B. Between Gibraltar and Morocco
  - C. Between Russia and Sakhalin Island
  - D. None of the above

Correct answer: A Type: Geography Level: moderate

Explanation: The Strait of Dover or Dover Strait, historically known as the Dover Narrows is the strait at the narrowest part of the English Channel, marking the boundary between the Channel and North Sea, separating Great Britain from continental Europe.



- 2. Which among the following country has signed but not ratified **The World**Health Organization Framework Convention on Tobacco Control
  - A. U.S
  - B. U.K
  - C. India
  - D. Pakistan

Correct answer: A Type: Current Affair Level: moderate

Explanation: Seven countries that have signed but not yet ratified **The World Health Organization Framework Convention on Tobacco Control** -Argentina, Cuba, Haiti, Morocco, Mozambique, Switzerland, and the United States

- **3.** The Rail Development Authority will be responsible for
  - 1. Setting efficiency and performance standards for rail operations
  - **2.** Suggesting on passenger and freight fares
  - 3. Ensuring fair play and level playing field for stakeholder investment

Select the correct answer using the code given below:

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

Correct answer: D Type: Current Affair Level: moderate Explanation:

The regulator will perform four primary functions—

- 1) Tariff determination
- 2) Ensuring fair play and level playing field for stakeholder investment;
- 3) Setting efficiency and performance standards; and
- 4) Dissemination of information.
- **4.** Consider the following statement with reference to **Phytorid waste water** treatment technology
  - 1. It involves a constructed wetland exclusively designed for the treatment of municipal, urban, agricultural and industrial wastewater.
  - **2.** Technology developed by National Environmental Engineering Research Institute.

Select the correct answer using the code given below:

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

Correct answer: C

Type: Environmental Scinece

Level: moderate Explanation:

Phytorid Wastewater Treatment Technology

- ✓ CSIR-NEERI's technology involves a constructed wetland exclusively designed for the treatment of municipal, urban, agricultural and industrial wastewater
- ✓ The system is based on the specific plants, such as Elephant grass (Pennisetumpurpurem), Cattails (Typha sp.), Reeds (Phragmitessp.), Cannas pp. and Yellow flag iris (Iris pseudocorus), normally found in natural wetlands with filtration and treatment capability. Some ornamental as well as flowering plants species such as Golden Dhuranda, Bamboo, Nerium, Colosia, etc. can also be used for treatment as well as landscaping purposes
- ✓ The phytorid technology treatment is a subsurface flow type in which wastewater is applied to cell / system filled with porous media such as crushed bricks, gravel and stones. The hydraulics is maintained in such a manner that wastewater does not rise to the surface retaining a free board at the top of the filled media
- ✓ The system consists of the following three zones: (i) inlet zone comprising of crushed bricks and different sizes of stones, (ii) treatment zone consisting of the same media as in inlet zone with plant species, and (iii) outlet zone
- ✓ The treated effluent is useful for municipal gardens, fountains and irrigation
- 5. Which of the following launched India Innovation Index?
  - a) NITI Aayog
  - b)Department of Industrial Policy & Promotion (DIPP)
  - c) Confederation of Indian Industry (CII)
  - d) All of the above

Answer: D

Topic : Economy Level : Moderate Type: Factual Explanation:

States will be ranked on innovations from 2017

- ✓ NITI Aayog, Department of Industrial Policy & Promotion (DIPP) and Confederation of Indian Industry (CII) together launched a mega initiative "India Innovation Index".
- ✓ It will rank states on Innovations through country's first online innovation index portal that will capture data on innovation from all Indian states on innovation and regularly update it in real time.
- ✓ The India Innovation Index Framework will be structured based on the best practices followed in Global Innovation Index (GII) indicators and additionally by adding India-centric parameters those truly reflect the Indian innovation ecosystem.

The Global Innovation Index (GII)

- ✓ The Global Innovation Index (GII), co-published by World-Intellectual Property Organization (WIPO), Cornell University and INSEAD with CII as a Knowledge Partner since inception, has been ranking world economies including India since 2007 according to their innovation capabilities and outcomes using 82 indicators among a host of other important parameters.
- ✓ It has established itself as both a leading reference on innovation and a 'tool for action' for policy makers.
- ✓ India currently ranks 66<sup>th</sup> out of 128 countries on the Global innovation Index (GII) 2016.

# G.S Paper -1

# **Topic: Social Issues**

## 1. Kashmir conflict takes toll on women's health

http://www.thehindu.com/todays-paper/kashmir-conflict-takes-toll-on-womens-health/article17882247.ece

### What's in news?

- Highlights of report "A Community based Prevalence Study of Mental Health Issues in Kashmir", conducted by Institute of Mental Health and Neuroscience, Kashmir.
- 11.3% of the adult population in the Valley suffers from mental illness because of the ongoing conflict, with higher prevalence among women. This is significantly higher than the national average of 7.3%.
- Prevalence of mental health disorder was more in females at 12.9% than males at 8.4%
- Class gradient:
- Prevalence of Mental Health Disorder is higher among the poor than those who are better off.

## G.S Paper -2

# Topic: Bilateral relations

1. Cabinet approves MoU between India, Bangladesh for fairway development of Ashuganj-Zakiganj stretch

http://www.business-standard.com/article/news-ani/cabinet-approves-mou-between-india-bangladesh-for-fairway-development-of-ashuganj-zakiganj-stretch-117040501375\_1.html

### What's in news?

The Union Cabinet has approved MoU between India and Bangladesh for fairway development of Ashuganj-Zakiganj stretch of Kushiyara river and Sirajganj-Daikhawa stretch of Jamuna river in the Indo-Bangladesh protocol route by undertaking necessary dredging jointly by the two countries.

### Benefits of this MoU:

• The MoU will considerably reduce the logistics cost of cargo movement to North Eastern India. It will also reduce the congestion through the Siliguri Chicken's Neck corridor.

# Background:

■ The Kushiyara River is a distributary river in Bangladesh and Assam, India. It forms on the India–Bangladesh border as a branch of the Barak River, when the Barak separates into the Kushiyara and Surma. The waters of the Kushiyara thus originate in the state of Nagaland in India and pick up tributaries from Manipur, Mizoram and Assam. The Kushiyara rejoins with the Surma at Markuli in Ajmiriganj upazila and flows south upto Bhairab Bazar receiving the name Kalni. The Kalni meets with the Dhanu, a branch of the Surma and renamed as the meghna.

The Jamuna River is the main distributary channel of the Brahmaputra River as it flows from India to Bangladesh. The Jamuna flows south and joins the Padma River, near Goalundo Ghat, before meeting the Meghna River near Chandpur. It then flows into the Bay of Bengal as the Meghna River.

# 2. Cabinet approves agreement on Audio Visual Co-Production between India and Bangladesh

http://pib.nic.in/newsite/PrintRelease.aspx?relid=160567 What's in news?

The Union Cabinet has approved the agreement on Audio Visual Co-Production India and Bangladesh.

# Salient features of the Agreement:

- The Agreement would cover co-production of films, documentaries, and animations films.
- An audio-visual co-production made in accordance with the proposed Agreement shall be entitled to all the benefits which may be accorded to any national audio-visual work by both countries in accordance with their respective laws and regulations.
- It will lead to exchange of art and culture among the two countries and create goodwill and better understanding among the peoples of both the countries.
- Co-productions provide an opportunity to create and showcase our soft power.
- It leads to generation of employment among artistic, technical as well as non-technical personnel engaged in the arena of Audio-Visual Coproduction including post-production and its marketing, thus adding to the Gross Domestic Product (GDP) of both the countries.
- The utilization of Indian locales for shooting raises the visibility / prospect of India as a preferred film shooting destination across the globe.

## Background:

• India has so far entered into audio-visual co-production agreements with Italy, United Kingdom, Germany, Brazil, France, New Zealand, Poland, Spain, Canada, China and the Republic of Korea.

## **Topic: Polity**

3. Thailand's king signs constitution that cements junta's grip <a href="https://www.theguardian.com/world/2017/apr/06/thailand-king-signs-constitution-path-polls-election">https://www.theguardian.com/world/2017/apr/06/thailand-king-signs-constitution-path-polls-election</a>

### What's in news?

 Thailand's new king has signed an army-drafted constitution that sets the country on the path to elections while cementing the grip of the military over any future government. • The constitution is the nation's 20th since the absolute monarchy was abolished in 1932.

# Key features of the new constitution:

- The new charter introduces a different electoral system, a modified proportional method of choosing the 500 members of the lower house of parliament in which people vote for one of 350 constituency candidates; those votes are totalled to determine which of the remaining 150 party list seats go to which party. Under the previous system voters cast two ballots, one for the candidate and one for the party.
- Along with weaker governments, the constitution stipulates that an unelected, 250-seat upper house, or senate, will wield significant influence in the years following the election, currently expected at the end of 2018.
- Membership of the senate will be essentially determined by the military, giving the generals enormous sway over future governments, which would need three quarters of the seats in the lower house to have a majority in both houses.
- Elected governments will also be bound in this constitution to follow the military's 20-year blueprint for Thailand, and it will be easier for the "independent" bodies, like the Constitutional Court, which will have enhanced powers, to constrain those governments even further.

## G.S Paper -3

# **Topic: Security related**

1. Cabinet approves extension of implementation of Crime and Criminal Tracking Network and Systems Project by one year <a href="http://www.business-standard.com/article/news-cm/cabinet-approves-extension-of-implementation-of-crime-and-criminal-tracking-network-and-systems-project-by-one-year-117040600339">http://www.business-standard.com/article/news-cm/cabinet-approves-extension-of-implementation-of-crime-and-criminal-tracking-network-and-systems-project-by-one-year-117040600339</a> 1.html

### What's in news?

- The Cabinet Committee on Economic Affairs has approved the proposal of the Ministry of Home Affairs for extension of the implementation phase of the Crime and Criminals Tracking Network and Systems (CCTNS) Project for another year beyond 31st March 2017.
- The extension would help in achieving the remaining objectives of the project comprehensively.

# Impact of the CCTNS Project will lead to:

- Citizen portals in all states and Centre that will facilitate transparency and speed in police service delivery, online registration of complaints and reporting and search of missing persons and stolen goods in self-service mode.
- Pan-India search on complete National Crime and Criminal database

- that is accessible to the Investigating Officers throughout the country.
- Search facility will be available to Police in regional languages for improved inter-state tracking of criminal movement.
- Reliable network connectivity to all Police Stations in the country.
- National level crime analytics that will be published at, increased frequency to help policy and law makers in taking data backed timely actions and in making appropriate policy interventions.
- Integration with various e-Governance projects such as Aadhaar, National Population Register, Vaahan Project of the Ministry of Surface Transport, Passport Seva and National Emergency Response System Project thus increasing the synergies and benefit accrued from these individual systems. It will expedite various kinds of police verification requests and investigation.
- Advanced features such as biometric based identification, trend and pattern analytics etc. that will be incorporated to enhance hi-tech investigation capability.

# What is CCTNS project?

- Crime and Criminal Tracking Network and Systems (CCTNS) is a project initiated in June 2009 which aims at creating a comprehensive and integrated system for enhancing the efficiency and effectiveness of policing at the Police Station level.
- This will be done through adoption of principles of e-Governance, and creation of a nationwide networked infrastructure for evolution of IT-enabled state-of-the-art tracking system around "investigation of crime and detection of criminals".
- CCTNS is a Mission Mode Project (MMP) under the National e-Governance Plan of Govt. of India.

### What it does?

- The Project will interconnect about 15000 Police Stations and additional 5000 offices of supervisory police officers across the country and digitize data related to FIR registration, investigation and charge sheets in all Police Stations.
- It will not only automate Police functions at Police station and higher levels but will also create facilities and mechanism to provide public services like registration of online complaints, ascertaining the status of case registered at the police station, verification of persons etc.
- In 2015, an additional objective of establishing a basic platform for an Inter-operable Criminal Justice System (ICJS) was added to the Project.

#### **Benefits:**

- The Full implementation of the Project with all the new components would lead to a Central citizen portal having linkages with State level citizen portals that will provide a number of citizen friendly services like Police Verification for various purposes including passport verification, reporting a crime including cyber-crime and online tracking of the case progress etc.
- The project will enable National level crime analytics to be published at increased frequency, which will help the policy makers as well as lawmakers in taking appropriate and timely action, it will also enable Pan-India criminal/accused name search in the regional language for improved inter-state tracking of criminal movement.
- This would lead to development of a national database of crimes and criminals.

# Topic: Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

## 2. Multi-Modal Terminal at Sahibganj

http://pib.nic.in/newsite/PrintRelease.aspx?relid=160517

What's in news?

 Prime Minister Shri Narendra Modi recently laid the foundation stone of the multi-modal terminal at Sahibganj, Jharkhand.

Key facts:

- The terminal at Sahibganj is an important component of the Jal Marg Vikas Project (JMVP) for the augmentation of the navigation capacity of National Waterway-1 (Ganga) from Varanasi to Haldia (1390 km).
- A Roll-on Roll-off (Ro-Ro) terminal at Sahibganj will provide critical connectivity to Bihar at Manihari for the cross –river movement of loaded and empty trucks. This will considerably reduce the cost and time of cargo movement between Sahibganj and Manihari.
- The state of the art terminal at Sahibganj will have cargo handling capacity of 2.24 Million Tons Per Annum (MTPA) on completion in 2019. The overall cost of the Sahibgang terminal is estimated to be Rs 467 Crore.
- The construction of multi-modal terminal and Ro-Ro terminal will help create substantial direct and indirect employment in Sahibganj and Jharkhand. Overall additional employment opportunities for 1.5 lakh persons are expected to be generated under the Jal Marg Vikas Project on Ganga river.

### **Benefits for Jharkhand:**

- The Sahibganj Multi Modal Terminal will link the city and the landlocked state of Jharkhand to foreign shores through the Bay of Bengal.
- The terminal will generate considerable direct and indirect

- employment for local people also.
- Jharkhand is richly endowed with mineral resources. The multimodal terminal at Sahibganj will play an important role in transportation of domestic coal from the local mines (in Rajmahal area) to various thermal power plants located along NW-1.

# Background:

- Sahibganj terminal is the second multi-modal terminal (out of the three) to be constructed on NW-1. In May 2016, IWAI had awarded the contract for the construction of a multi-modal terminal at Varanasi. The third terminal will be constructed at Haldia in West Bengal where the work is expected to commence soon. River Ganga is being developed under the Jal Marg Vikas Project (JMVP) with the technical and financial assistance of World Bank at an estimated cost of Rs. 5369 crore. The project would enable commercial navigation of vessels with capacity of 1500-2,000 DWT.
- NW 1: Ganga-Bhagirathi-Hooghly river system from Allahabad to Haldia was declared as National Waterway No.1. The NW-1 passes through Uttar Pradesh, Bihar, Jharkhand and West Bengal and serves major cities and their industrial hinterlands.

# **Practice questions:**

- 1. Consider the following statements about Public interest litigation (PIL):
  - 1. A PIL may be introduced in a court of law by the court itself (suo motu).
  - 2. A PIL can be introduced only by the aggrieved party.

Which of the above statements is/are correct?

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

Answer : A Topic : Polity Level: Medium Type : Factual

A PIL may be introduced in a court of law by the court itself (suo motu), rather than the aggrieved party or another third party. For the exercise of the court's jurisdiction, it is not necessary for the victim of the violation of his or her rights to personally approach the court. The member of the public may be a non-governmental organization (NGO), an institution or an individual.

- 2. Consider the statements about Organisation for the Prohibition of Chemical Weapons (OPCW).
  - 1. It is an intergovernmental organization based in The Hague, Netherlands.
  - 2. The organisation was awarded the 2013 Nobel Peace Prize. Which of the above statements is/are incorrect?
  - a) 1 only
  - b) 2 only

c) Both 1 and 2

d) None Answer : D

Topic: International Organization

Level: Medium Type: Factual Explanation:

- The Organisation for the Prohibition of Chemical Weapons (OPCW) is an intergovernmental organisation, located in The Hague, Netherlands.
- The organisation promotes and verifies the adherence to the Chemical Weapons Convention which prohibits the use of chemical weapons and requires their destruction. The verification consists both of evaluation of declarations by member states and on-site inspections.
- The organisation was awarded the 2013 Nobel Peace Prize.
- The Chemical Weapons Convention (CWC) is an arms control treaty which outlaws the production, stockpiling, and use of chemical weapons and their precursors. The full name of the treaty is the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction and it is administered by the Organisation for the Prohibition of Chemical Weapons (OPCW).

# 3. Consider the following rivers:

- 1. Kameng
- 2. Subansiri
- 3. Dibang
- 4. Barak

Which of the above are tributaries of Brahmaputra?

- a) 1,2 and 3
- b) 2,3 and 4
- c) 1,2 and 4
- d) 2 and 3 only

Answer: A

Topic: geography Level: Medium Type: Factual Explanation:

"The Brahmaputra receives numerous tributaries in its 750 km long journey through the Assam valley. Its major left bank tributaries are the Burhi Dihing and Dhansari (South) whereas the important right bank tributaries are the Subansiri, Kameng, Manas and Sankosh. The Subansiri which has its origin in Tibet, is an antecedent river. The Brahmaputra enters into Bangladesh near Dhubri and flows southward. In Bangladesh, the Tista joins it on its right bank from where the river is known as the Yamuna. It finally merges with the

river Padma, which falls in the Bay of Bengal."

# 4. Consider the following statements:

- 1. The objective of the National Food Security Mission is to increase production of rice, wheat and pulses only
- 2. Production of horticulture crops have outpaced the production of food-grains consistently since 2012-13

Which of the statements above is/are correct?

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

Answer: C

Topic : Schemes Level: Medium Type : Factual Explanation:

"Despite the deficit monsoon, unseasonal rains and hailstorm in the major part of the country, the production of horticulture crops have outpaced the production of foodgrains since 2012-13…"

NFSM includes coarse cereals as well as commercial crops.