# BYJU'S UPSC MONTHLY MAGAZINE 2017

### **Cow Slaughter Ban**

India, a nation looking for a boon in a ban...

### Job loss in the Indian IT sector

Trump's executive order and the ensuing chaos

### SAARC Satellite

India's gift to neighbouring countries

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Was it right of India to skip the forum?

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# POLITY

#### 1. Centre allows beacon use for emergencies

#### What's in news?

- The Centre issued a notification allowing officials on emergency and disaster management-related duties to use beacons on top of their vehicles.
- The notification allows use of multi-coloured red, blue and white light — beacons on top of official vehicles related to "control of fire, police duty, defence forces or paramilitary forces for maintenance of law and order".
- Officials on disaster management duties related to "natural disasters, including earthquake, flood, land slide, cyclone, tsunami, and man-made disasters such as nuclear disaster, chemical disaster and biological disaster" can use vehicles with multi-coloured beacons.
- The Transport Department of each State will need to issue a notice enlisting the list of authorities to whom the permission to use vehicles with multi-coloured lights.

#### 2. NFDC to dub regional movies in Hindi

#### What's in news?

- Presidential nod to a parliamentary panel recommendation that the National Film Development Corporation (NFDC) either dub regional movies or have them carry Hindi subtitle.
- The Committee of Parliament on Official Language has also recommended that film-makers submit their script in Hindi to the NFDC and make it available to all concerned.

#### About NDFC:

- The NFDC facilitates line production services of shooting in India and animation services of overseas clients. It deals with film financing, production and distribution, and works under the Ministry of Information and Broadcasting.
- As of now, the corporation's sub-rules on submission of applications for feature films state that the applicants should submit six copies of their script in English and one in the language the movie is to be made.
- The recommendation only covers regional films produced by the NFDC.

#### 3. New IT rules to beef up Aadhaar

#### What's in news?

 To address privacy and security concerns over Aadhaar, the Centre is in the process of educating government agencies that sensitive data must not be made public, and is drafting amendments to the Information Technology (IT) Act to strengthen provisions for data protection and security.

• <u>Area of focus</u>: the new IT law will quell security concerns related to digital payments as well as privacy issues.

#### Data Leakages:

- According to a report by the Centre for Internet and Society (CIS)- close to 135 million Aadhaar numbers and 100 million bank account numbers could have leaked from official portals dealing with government programmes of pensions and rural employment
- With Aadhaar being used to authenticate and authorise transactions, the financial risks presented by the disclosure of such data are greatly exacerbated
- As per the CIS report, the data in question has not been treated as confidential at all in several cases and the government agencies in question have, in fact, taken pains to publish them. "These are wilful and intentional instances of treating Aadhaar numbers and other personally identifiable information (PII) as publicly shareable data by the custodians of the data," the CIS report noted.

#### 4. 'Data leaks not from UIDAI, but from States'

#### Context:

 Centre for Internet and Society (CIS), a Bengaluru-based organisation, based on a study reports - data of over 130 million Aadhaar cardholders have been leaked from four government websites.

#### Center's response:

- Leaks of Aadhaar card details are not from the UIDAI, but at the State level.
- Aadhaar is foolproof. Biometric technology is the best system in 2016.

#### A-G's assurance to Supreme Court:

- Biometric details are kept in a central database run by the Union government and the random 12 digit code was impossible to break and may take over a 100 years to crack.
- Without biometric accessibility, usage of Aadhar number is null.

#### 5. NITI Aayog for more research, less teaching

#### What's in news?

 The National Institution for the Transformation of India (NITI) Aayog has recommended that faculty at "world class" institutions prioritise research and be allowed to "reduce their teaching responsibility,"

- World class universities also ought to be allowed to
   Realised to
- Universities ought to be ranked according to metrics such as teaching, research output and funding won from the private sector.

to compete for research projects from industry.

recruit research staff from abroad and be encouraged

#### Why?

 This would ensure that investments in research better translate to more products and bolster "innovation and development"

#### World class universities:

- 'World class universities' are part of a governmentoutlined plan to raise funding for 10 public and 10 private universities and mould them into institutions that rank among the world's best.
- 6. <u>'National Science, Technology and Innovation</u> <u>Foundation'</u>
  - The NITI Aayog proposes setting up of a new 'National Science, Technology and Innovation Foundation'
  - Head- distinguished scientist.

#### Main Task:

- Coordinate with science and technology departments, ministries, governments and private sector bodies and deliberate on national issues and recommend interventions.
- Review progress of projects every six months and propose "course corrections" for achieving these goals.

#### New Database of schemes:

 Creation of a database of all existing schemes related to science and technology across ministries and departments.

#### **Objectives behind creation of Database:**

- This will provide information on the coordinating ministry, its objectives and available funds.
- Key purpose would be to avoid "duplication of efforts, reduce approval times, increase accountability and collaboration between entities and measured outcomes,"

#### Other notable recommendations:

- More public private partnerships.
- Given the government's "limited funds" the NITI Aayog recommends research priorities to water management, agriculture, energy, waste management, health, connectivity and security.

#### 7. SC refuses plea to make Hindi compulsory in school

#### What's in news?

• The Supreme Court refused to entertain a plea to make Hindi language compulsory for school students to promote national unity. • Reasons given: Making Hindi compulsory might open the flood gates for people speaking other languages to demand that theirs should also be made compulsory.

#### Petitioner Ashwini Kumar Updhayay contention:

- Non-execution of the three-language formula enunciated in the 1968 National Policy Resolution by the Centre in consultation with the States.
- 1968 National Policy Resolution: three-language formula provided for the study of Hindi, English and modern Indian language in Hindi-speaking States, and Hindi, English and a regional language in the non-Hindi speaking States
- 1968 policy was framed in response to demands from non-Hindi-speaking States like Karnataka, Andhra Pradesh and Tamil Nadu. However, all these States had not followed the three-language formula till date

#### 8. CIC seeks details of action against former CJI

#### Context:

- The Supreme Court judgment dated July 18, 2013, in the matter of Christian Medical College, Vellore, vs Union of India, was allegedly uploaded on a private website hours before the pronouncement.
- On July 24 the same year, eminent RTI activist Subhash Agrawal sought from the Law Ministry details of complaints filed by Justice (Retired) V.R. Krishna Iyer and Dr. M. Furquan. He also asked about the action taken on the complaints. However, he did not get any concrete information.

#### What's in news?

• The Central Information Commission has directed the Supreme Court Information Officer and the Union Law Ministry to share details of the action taken on a complaint regarding former Chief Justice of India (CJI) Altmas Kabir in connection with the alleged leak of a judgment in 2013.

#### Need of the hour :

- Information Commissioner M. Sridhar Acharyulu observed that a comprehensive mechanism was needed to ensure both answerability and access to information about the administration of justice.
- There is no system for redress of grievances in any courts of India, and no mechanism to receive complaints against the judiciary.

#### 9. <u>Government releases draft rules for no-fly list of unruly</u> passengers

#### Context:

 Post Shiv Sena MP Ravindra Gaikwad incident of unruly behaviour, India has proposed a flying ban of two months and up to two years and beyond for any unruly passengers reported on domestic flights in the country.

#### New Draft Rules:

- making India the first country in the world to have a no fly list based on safety.
- The ministry of civil aviation has proposed three levels of unruly passengers under its proposed draft Civil Aviation Requirement (CAR):
  - Level I: passengers indulging in disruptive behaviour such as physical gestures, verbal harassment, unruly inebriation and other such activities
  - Level II: passengers indulging in physical abuse like pushing, kicking, hitting, grabbing, inappropriate touching or sexual harassment are likely to be booked.
  - Level III: Those indulging in life threatening behaviour like damage to aircraft operating system, physical violence such as choking, eye gouging murderous assault or actual breach of the flight crew among others. Punishment for Level III a ban on flying with the airline on which the act has been committed for at least two years.
- If security agencies put any passenger's name on a nofly list he or she too will be banned from boarding flights by all airlines.
- The ban made by one airline is not binding on the other.
   If a passenger is banned by one airline then it will be left to other domestic airlines to decide on whether they want to fly such a passenger or not.
- International Airlines: foreign airlines can implement India's no-fly list, provided if the Rights of Carriage Act of the international airlines also has similar provisions in it.

#### Two-level Committee to handle the complaint:

- **Level-1:** Internal committee at the airline level headed by a retired District and Session Judge.
- **Level-2:** an appeal at the government-level headed by retired Judge of a high court.

#### 10. <u>Set up database of children in orphanages, SC tells</u> <u>Govt</u>

#### Context:

 A PIL petition was filed on the basis of a 2007 newspaper report alleging that orphanages in Mahabalipuram, Tamil Nadu, run by NGOs as well as government institutions, were reportedly involved in systematic sexual abuse of children.

#### Directions issued by Supreme Court:

- Set up a database of children living in orphanages and child care institutions to ensure their safety and welfare.
- Centre, States and union territories (UTs) to complete the registration of all child care institutions by yearend. The court said the registration process should also

include a database of all children in need of care and protection and update it every month.

- 'Ensure privacy'- It asked the authorities concerned to ensure confidentiality and privacy in maintaining the database.
- Alternative option like adoption and foster care should be seriously considered.
- It is imperative that the Union government and the governments of States and UTs must concentrate on rehabilitation and social re-integration of children in need of care and protection.
- <u>Skill development</u> It said Centre's schemes such as skill development and vocational training must be taken advantage of keeping in mind the need to rehabilitate such children.
- Inspection Committees- States and UTs to set up 'Inspection Committees' before July 31 to conduct regular inspections of child care institutions and prepare reports of such inspections so that the living conditions of kids there undergo positive changes.
- Prepare individual child care plans.
- The process of conducting a social audit must be taken up in right earnest by the National Commission for the Protection of Child Rights as well as by each State Commission for the Protection of Child Rights.

#### 11. SC cautions against delay in enacting anti-torture law

#### Context:

- India faced tough peer review at the United Nations Human Rights Council
- Member countries questioned India on the AFSPA, marital rape laws and custodial torture.

#### What's in news?

- Supreme Court cautioned the government against delay in enacting human rights laws, especially the long-pending anti-torture statute, in national interest
- Delay in enacting laws to protect citizens against torture and other human rights violations might have "international ramifications."

#### 12. Act tough against Maoists, States told

#### Context:

 Meeting of Chief Ministers and top-officers of the Left Wing Extremism affected states

#### Highlights:

- States to take ownership in leading operations against the Maoists.
- An aggressive approach needs to be adopted to solve the menace
- No deployment of army in anti-naxal operations, even for the purpose of training.

- Unified Coordination and Command is needed on the LWE front.
- Central armed police forces to actively co-ordinate with the States.

#### States voice concern:

- States having meagre resources to cater to the needs of such operations alone.
- Several States also raised the issue of discontinuation of central schemes such as Special Infrastructure Scheme (SIS) and Integrated Action Plan (IAP) and a considerable reduction in central funds as an impediment to winning the war against the Maoists.

#### Way forward:

- Prevention of Money Laundering Act needed a review to make it more effective in choking funds to the Maoists
- Additional deployment of forces.
- Proper implementation of schemes in the LWE areas.

#### 13. Disclose foreign funds, MHA tells political parties

#### What's in news?

- The Ministry of Home Affairs issued notices to all political parties, including the ruling Bharatiya Janata Party, to disclose the foreign funds received by them.
- Notices were sent as per norms prescribed under the Foreign Contribution Regulation Act (FCRA), 2010, which bars any political party from receiving donations from any "foreign company".

#### Changes made in FCRA:

- Last year, government had amended the FCRA through the Finance Bill route
- Amendment allowed foreign origin companies to fund NGOs
- Cleared the way for donations to political parties by changing the definition of "foreign companies".
- The amendment ensures that "donations made by such (foreign shareholding) companies to entities including political parties will not attract provisions of the FCRA, 2010".
- Contributions made by Indian companies with foreign holdings up to the prescribed limit as per the extant Foreign Direct Investment policy will not be treated as foreign contribution.

#### <u>Representation of People's Act and foreign funds:</u>

- The Representation of People's Act bars parties from receiving foreign funds.
- The Foreign Contribution (regulation) Act, 2010
- "It is a consolidating act whose scope is to regulate the acceptance and utilisation of foreign contribution or foreign hospitality by certain individuals or associations

or companies and to prohibit acceptance and utilisation of foreign contribution or foreign hospitality for any activities detrimental to the national interest and for matters connected therewith or incidental there to"

#### 14. Funds to parties: Govt. may amend FCRA again

#### Context:

- Delhi High Court issued notice to the government for not initiating any action against the Congress and the Bharatiya Janata Party, which received foreign funds from two subsidiaries of Vedanta, a U.K.-based company.
- The Home Ministry will seek the Attorney-General's opinion to amend the repealed Foreign Contribution Regulation Act (FCRA) 1976, which barred foreign donations to political parties.

#### FCRA amendment:

- FCRA was amended last year through the Finance Bill route.
- This amendment allowed foreign-origin companies to fund NGOs and also cleared the way for donations to political parties by changing the definition of "foreign companies."
- Even though the amendment was done retrospectively it only made valid the foreign donations received after 2010, the year when the 1976 Act was amended.

#### Contempt petition:

- Association for Democratic Reforms, a political watchdog, moved a contempt petition against the Home Ministry in March pointing out that the directives of the High Court against the two political parties which received foreign funds were not followed.
- The ADR filed a PIL plea against the two parties for violating the FCRA.
- The Delhi High Court had held that the donations were illegal in 2014, but the two parties challenged the order in the Supreme Court but later withdrew the petition.

#### Foreign companies definition anomaly:

- The original FCRA provision- declares that any company with over 50 per cent FDI was a foreign entity
- Finance and Commerce ministries- treat companies based in India and having Indian directors and employees as Indian subsidiaries.

#### 15. EC to hold all-party meet on EVMs

#### What's in news?

- The Election Commission released the agenda for an all-party meeting on May 12.
- The agenda includes
  - Deliberations on the security of electronic voting machines (EVMs).
  - The electoral body will also invite suggestions from

the parties on conducting a "machine tampering" challenge.

- Suggestions on revisiting the rules on counting of paper slips from the VVPAT (Voter Verifiable Paper Audit Trail) system will also be discussed.
- Stringent provision- The proposal to make bribery and undue influence during elections a cognisable offence. The Commission is of the view that law has to be amended to make penal provisions more stringent.
- To discuss proposals such as one on capping donations in cash at Rs. 20 crore or 20% of the donations in a year, whichever is less.

#### **Election Commission proposals:**

- The EC has proposed that anyone charged with bribery be disqualified from contesting elections.
- The EC has been calling for disqualification even prior to the conviction by court in the case of for serious offences.
- The EC has suggested that for crimes punishable with imprisonment of five years or more for a case registered at least six months earlier, disqualification should commence from the stage the charges are framed by the court.

#### Representation of the people Act and EC:

 In Representation of the People Act, there is a specific section (58A) that empowers the EC to order a re-poll or to countermand election in a constituency in= the event of booth capturing.

#### 16. <u>Rajnath Singh to States: Ensure comfortable</u> environment for Kashmiris

#### In news:

- Union Home Minister Rajnath Singh advised all the Chief Ministers to ensure "comfortable environment" for Kashmiri students and workers in their states as there have been incidents of their harassment at some places.
- Singh's advice came at a meeting of Northern Zonal Council of the states of Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab and Rajasthan, National Capital territory of Delhi and Union Territory of Chandigarh here.

#### Zonal Council:

 The idea of creation of Zonal Councils was mooted by the first Prime Minister of India, Pandit Jawahar Lal Nehru in 1956 when during the course of debate on the report of the States Re-organisation Commission, he suggested that the States proposed to be reorganised may be grouped into four or five zones having an Advisory Council 'to develop the habit of cooperative working" among these States. This suggestion was made by Pandit Nehru at a time when linguistic hostilities and bitterness as a result of re-organisation of the States on linguistic pattern were threatening the very fabric of our nation. As an antidote to this situation, it was suggested that a high level advisory forum should be set up to minimise the impact of these hostilities and to create healthy inter-State and Centre-State environment with a view to solving inter-State problems and fostering balanced socio economic development of the respective zones

#### **COMPOSITION OF ZONAL COUNCILS**

- In the light of the vision of Pandit Nehru, five Zonal Councils were set up vide Part-III of the States Reorganisation Act, 1956. The present composition of each of these Zonal Councils is as under:
- The Northern Zonal Council, comprising the States of Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, National Capital Territory of Delhi and Union Territory of Chandigarh;
- The Central Zonal Council, comprising the States of Chhattisgarh, Uttarakhand, Uttar Pradesh and Madhya Pradesh;
- The Eastern Zonal Council, comprising the States of Bihar, Jharkhand, Orissa, Sikkim and West Bengal;
- The Western Zonal Council, comprising the States of Goa, Gujarat, Maharashtra and the Union Territories of Daman & Diu and Dadra & Nagar Haveli; and
- The Southern Zonal Council, comprising the States of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and the Union Territory of Puducherry.
- The North Eastern States i.e. (i) Assam (ii) Arunachal Pradesh (iii) Manipur (iv) Tripura (v) Mizoram (vi) Meghalaya and (vii) Nagaland are not included in the Zonal Councils and their special problems are looked after by the North Eastern Council, set up under the North Eastern Council Act, 1972. The State of Sikkim has also been included in the North Eastern Council vide North Eastern Council (Amendment) Act, 2002 notified on 23rd December, 2002..

#### **COMMITTIEES OF ZONAL COUNCILS**

 Each Zonal Council has set up a Standing Committee consisting of Chief Secretaries of the member States of their respective Zonal Councils.

#### **ORGANISATIONAL STRUCTURE OF ZONAL COUNCILS**

- Chairman The Union Home Minister is the Chairman of each of these Councils.
- Vice Chairman The Chief Ministers of the States included in each zone act as Vice-Chairman of the Zonal Council for that zone by rotation, each holding office for a period of one year at a time.
- Members- Chief Minister and two other Ministers as nominated by the Governor from each of the States and two members from Union Territories included in the zone.

- Advisers- One person nominated by the Planning Commission for each of the Zonal Councils, Chief Secretaries and another officer/Development Commissioner nominated by each of the States included in the Zone
- Union Ministers are also invited to participate in the meetings of Zonal Councils depending upon necessity.

#### **ROLE AND OBJECTIVES OF THE ZONAL COUNCILS**

- The main objectives of setting up of Zonal Councils are as under:
- Bringing out national integration;
- Arresting the growth of acute State consciousness, regionalism, linguism and particularistic tendencies;
- Enabling the Centre and the States to co-operate and exchange ideas and experiences; and
- Establishing a climate of co-operation amongst the States for successful and speedy execution of development projects.

#### 17. <u>Be scientific On GM mustard for farms, the Centre must</u> privilege reason over politics in taking the call

 With the Genetic Engineering Appraisal Committee, an Environment Ministry body that assesses genetically modified yields, endorsing transgenic mustard for ecological discharge, a key obstacle stays before agriculturists can develop it: Environment Minister Anil Dave's endorsement, under a method set around the UPA government.

#### Why government opposed Bt brinjal?

- Long haul studies might be required to check its wellbeing and natural effect.
- It included innovation created by the multinational Monsanto (which had an indirect stake in Mahyco).

#### Case of GM mustard (DMH-11):

- Then again, GM mustard (DMH-11) was produced by a group of researchers at Delhi University driven by previous bad habit chancellor Deepak Pental under a legislature financed extend.
- Fundamentally, it utilizes three qualities from soil bacterium that makes self-pollinating plants, for example, mustard amiable to hybridisation.

#### What opponents say?

 Many of them are opposed to the commercial release of any form of transgenic plants; they fear that introducing genes from soil bacterium or other forms of animal life into plants will amount to playing with the natural order of plant life.

#### What proponents are saying?

 Defenders of GM products say plants and creatures are always swapping bacterial qualities with air, soil and water, and furthermore that the main method for deciding whether a quality can deliver proteins dangerous to people is to subject it to a methodical testing process.

 A long time of field tests on transgenic corn, soyabean and brinjal in different nations have demonstrated no wellbeing dangers that fluctuate with their non-GM variants.

#### Way forward :

- Farmers require innovation, new information and administrative support to get the best out of their seeds.
- Progressive governments have neglected to proceed onward the draft National Biotechnology Regulatory Bill, 2008 that would empower a biotechnology controller to come to fruition.
- Without such enactment, issues to be settled on the premise of science will be helpless before political practicality.

#### 18. Minority status only if trusts enrol on NITI site

#### In news:

- New Rule for Educational trusts and societies: If they want minority status, then they need to register as non-governmental organisation with the NITI Aayog(whether they are seeking government aid or not)
- Requirements for enrollment: All petitioners are required to submit unique ID of the trust/society as given by the NITI Aayog portal NGO Darpan (it is not needed only in cases of institutions run by individuals)
- Details such as PAN and Aadhaar of all trustees and office-bearers will be required

#### Why these requirements?

 The registration with the NITI Aayog portal Darpan is likely to put all the financial transactions of the trust and its office-bearers under government scanner

#### What is the need of Minority Status?

 Minority status permits schools and colleges to have a say in the reservation quantum and limits interference from the government

#### Background:

- The government had last year made it mandatory for NGOs and voluntary organisations to register with the NITI Aayog portal to enable them to apply for grants from any Ministry
- Since 2004, the commission has awarded minority status certificates to 12,954 schools and colleges in the country.

#### 19. Safeguard rights of online users: Supreme Court

#### Context:

• Constitutionality of the contract entered into between WhatsApp and Facebook on data sharing.

#### In news:

#### Supreme Court:

- The state has a duty to ensure that subscribers of online service providers are not "entrapped" by them.
- S.C asked, Can WhatsApp, an instant messaging platform, impose any condition on its users here violating any part of the Constitution?
- <u>Government response</u>: Government is in the process of building a regulatory regime of a binding nature to protect user data.
- Counsel for Facebook response: They were not sharing any sensitive or personal data and since India was shifting to digitisation, the service provided by WhatsApp was beneficial as it was end-to-end encrypted.

#### 20. Indian bags key post in UNFCCC

#### In News:

- An Indian national has been selected to a crucial post in the United Nations Framework Convention on Climate Change (UNFCCC).
- Ovais Sarmad appointed to join the UNFCCC as the Deputy Executive Secretary.
- The appointment has been made after consultation with the Conference of Parties through its Bureau.
- The appointment is significant as UNFCCC aims to stabilise greenhouse emission and slow down climate change.

#### 21. <u>Cabinet gives nod to 10 new atomic reactors for power</u> <u>generation</u>

#### In News:

- The Union cabinet cleared a proposal to indigenously build 10 atomic reactors of 700 MW each under its Make in India flagship programme.
- The largest ever approval granted for such facilities in one go.
- The Pressurised Heavy Water Reactors (PHWRs) to have indigenous but latest technology.
- The 10 reactors would be built at Mahi Banswara (Rajasthan), Chutka (Madhya Pradesh), Kaiga (Karnataka) and Gorakhpur (Haryana).

#### Importance of the decision:

- Prioritise the use of clean power in India's energy mix as part of low-carbon growth strategy
- Ensure long-term base load requirement for the nation's industrialisation.
- Supports India's commitment to sustainable development, energy self-sufficiency, and bolsters global efforts to combat climate change

#### Key fact:

- India currently has installed nuclear power capacity of 6,780 MW from 22 operational plants.
- Another 6,700 MW of nuclear power is expected to be added by 2021-22 when currently under-construction projects go onstream in Rajasthan, Gujarat, and Tamil Nadu.
- The total share of nuclear power in the country currently stands at a measly 3.5 percent.

#### 22. NTRO now under Intelligence Act

#### In News:

- The National Technical Research Organisation (NTRO), which reports to the Prime Minister's Office (PMO) and the National Security Advisor (NSA) will now have the same "norms of conduct" as the Intelligence Bureau (IB) and the Research and Analysis Wing (R&AW).
- The Home Ministry issued a notification listing NTRO under The Intelligence Organisations (Restriction of Rights) Act, 1985.
- The NTRO was created after the 1999 Kargil conflict as a dedicated technical intelligence agency.

#### Restrictions to be imposed:

- The Act prevents employees of a notified agency from forming unions/associations
- Puts restrictions on the employee's freedom of speech, bars any communication with the press, or publishing a book or other document without the permission of the head of the intelligence organisation.

#### **Opposition:**

 Both IB and R&AW -opposed the inclusion of any other organisation in the list of monitoring agencies under the Act.

#### Other agencies demand:

 Agencies like the National Investigation Agency (NIA), the Directorate of Revenue Intelligence (DRI), the Narcotics Control Bureau (NCB) among others have been asking the Home Ministry to include them under the Intelligence Organisations Act.

#### 23. VM hackathon from June 3

#### Context:

• EVM's tampering issue.

#### In news:

- The Election Commission invited recognised political parties to an "Electronic Voting Machine (EVM) Challenge" beginning June 3.
- EC challenging the parties to demonstrate tampering EVM.
- Only Indian experts are allowed to participate in the event.

- The challenge will be open for four to five days, for the political parties that participated in the Assembly elections in Goa, Punjab, Manipur, Uttarakhand and Uttar Pradesh.
- An independent team of experts will supervise the proceedings, which will be video-recorded.
- Experts will be allowed to open and inspect the machine, they will not be allowed to tweak its components.

#### Procedure:

- · Political parties can nominate three experts
- Each party will be assigned four EVMs of their choice, picked up from EC warehouses in any Assembly constituency.

#### 24. Indian EVMs far superior. EC

#### Context:

• EVM tampering issue.

#### In news:

• Election Commission reiterated that the device being a standalone machine could not be hacked and that it was far superior to those manufactured abroad.

#### EVM's are foolproof:

- EVM's do not have any frequency receiver or data decoder for wireless signalling.
- Manipulation at the manufacturing stage is ruled out due to very stringent security protocol on software security.
- The results cannot be altered even by activating any malicious software as the chip used is only one-time programmable.
- The control unit activates the ballot unit for only one key press at a time; any additional key pressed is not sensed and this makes it impossible to send signals by pressing a sequence of keys or secret codes.
- The new model introduced in 2013 has additional features like tamper detection and self diagnostics, which checks if any changes have been made.

#### <u>Key facts:</u>

- Indian manufacturers have supplied EVMs to Namibia, Nepal and Bhutan.
- Countries like Australia, Russia, Afghanistan, Nigeria and Bulgaria, have also shown interest in the product
- It is manufactured by two public sector undertakings, Bharat Electronic Limited and Electronics Corporation of India.

#### 25. The Three Year Agenda

#### Context:

• The draft "Three Year Action Agenda" of the NITI Aayog has been circulated recently to its governing council

• This draft will be finalised after considering suggestions from the State Governments

#### Five-Year Plan

- After(Union Government) allowing for the 12th fiveyear plan to phase itself out, the transition is now complete
- Five-year plans are reminiscent of centrally planned economies; most such countries, like the Soviet Union, China and Romania, had similar planning horizons

#### Other documents:

- The seven-year policy strategy
- The 15-year long-term vision

#### **Objective of Three Year Action Agenda:**

 It seeks to embark on "a path to achieve all-round development of India and its people" through concerted action.

#### What are the advantages of a three-year timeline?

- Electoral cycles do not synchronise with (earlier) five-year plans; quite often, this entailed outcome accountability to rest with a successor government.
- But a "Three Year Action Agenda" makes the government in office more directly accountable for the implementation of its plans
- Augmenting the "Three Year Action Agenda" with a seven-year implementable policy strategy and a 15-year vision enables us to look into the future, particularly at evolving technology, demography and ecology, and accordingly align our policies
- The 15-year vision is also somewhat coterminous with the Sustainable Development Goals (SDGs) of the United Nations (UN). The new format thus combines domestic aspiration with global aims.

#### 26. Fresh move to impeach Justice Nagarjuna Reddy

#### In news:

- Impeachment proceedings have been initiated against Justice C.V. Nagarjuna Reddy of the High Court for Andhra Pradesh and Telangana.
- 60 members of the Rajya Sabha have submitted a motion seeking initiation of impeachment proceedings.
- Second attempt to impeach Justice Nagarjuna Reddy.

#### Allegations against Justice:

- Interfering in the judicial process.
- Caste slurs including death threats against a Dalit Junior Civil Judge Sanku Rama Krishna at the courts in Rayachoti, a town in Andhra Pradesh's Kadapa district

#### Procedure :

• Vice President to constitute a three-member committee under the 1968 Judges (Inquiry) Act, which generally consists of a sitting Supreme Court judge and two High Court Chief Justices.

- This is done in consultation with the CJI.
- The Committee will function like a trial court, examining the accusations against Justice Reddy and ruling whether they are well-founded. Thereafter it will advise in favour, or against the judge's removal.
- The Committee's decision will then be placed in both houses of Parliament for a vote, and would require a two-third majority of MPs present voting in favour of the motion in the same session, or an absolute majority of a joint session, for the judge to be removed.
- Article 124 (4) of the Constitution stipulates that a minimum of 50 Rajya Sabha MPs or double that number from the Lok Sabha are required as signatories to initiate impeachment, the only means to remove judges from office in the country's higher judiciary.

#### 27. Issue fresh licences for meat traders: HC

#### Context:

- The Yogi Adityanath government, soon after coming into power had directed administrative and police authorities to shut down or seal slaughterhouses in the State which according to it were running unlawfully or were unregistered.
- The State also shut down meat shops.
- Issue of livelihood.

#### Reasons given by the government:

• The State has no obligation to construct slaughter houses or make provisions for them and was merely acting against illegal setups in accordance with the norms of the National Green Tribunal (NGT).

#### In news:

- The Allahabad High Court directed the Uttar Pradesh
  government
- To start issuing fresh licences and no-objection certificates (NOCs) to meat traders in the State.
- Renew existing licences.

#### Verdict:

- The responsibility for constructing slaughterhouses lay with the local municipal corporations
- The State could not prevent people from eating meat.

#### 28. New restrictions on cattle slaughter

#### In news:

• The Ministry of Environment, Forest and Climate Change notified new rules- the Prevention of Cruelty to Animals (Regulation of Livestock Markets) Rules, 2017- that seeks to ban the sale of cattle for slaughter at animal markets across the country.

#### Sellers:

• Those who wish to sell cattle — bulls, cows, buffaloes,

steers, heifers and camels — may do so only after they formally state that the animals have not been "brought to the market for sale for slaughter".

#### **Buyers at market:**

- Needs to be an agriculturalists (must be verified by the concerned authority).
- Resale of the animal/s for a period of six months from the date of purchase is prohibited.
- Buyers should follow the State cattle protection and preservation laws" and "not sacrifice the animal for any religious purpose".
- Prohibition of cattle purchased from animal markets being sold outside the State, without permission.

#### Implementing agency:

- Monitoring committees at the State and district levels will be set up to implement the rules and monitor the functioning of animal markets.
- · Markets will be identified and registered
- Approval of the District Animal Market Monitoring Committee, chaired by the Collector or District Magistrate is needed to set up new markets.
- To inhibit smuggling, animal markets may not function within 25 kilometres of a State border and 50 kilometres of an international border.
- Provisions to prevent cruel transport and treatment of animals:
- Notification prohibits practices that are cruel and harmful include sealing teats of the udder using any material such as adhesive tapes to prevent the calf from suckling, putting any ornaments or decorative materials on animals, using any type of muzzle to prevent animals from suckling or eating food and injecting oxytocin into milch animals.

#### Present scenario:

- At present 90% of buffaloes are sourced from mandis by middlemen for sale in slaughterhouses
- A mere 10% of buffaloes are sourced directly from farmers.

#### 29. Notification comes after SC directive

#### In news:

- Supreme Court had earlier issued directive to the government to form an inter-ministerial committee to recommend ways of preventing cattle smuggling.
- Directive was in response to the 2014 writ petition filed by Gauri Mulekhi of People for Animals.
- The inter-ministerial committee recommended: rules to be framed under the Prevention of Cruelty to Animals Act 1960 to regulate livestock markets.

#### Impacts of the new rules framed:

- Weeds out middlemen role from the supply chain linking farm-heads to slaughter houses.
- Improve traceability of zoonotic diseases
- Curb illegitimate slaughter and smuggling and
- Put the onus on cattle-owners to dispose of their animals responsibly.

#### 30. Will not follow notification on cattle sale, says Mamata

#### Context:

• Centre Government issued notification imposing new restrictions on sale of cattle for slaughter in animal markets under the Prevention of Cruelty to Animals Act, 1960 (PCA)..

#### <u>In news:</u>

States like West Bengal and Kerala are against such a move

#### What do States say?

- Ban is undemocratic and unconstitutional.
- Cattle markets fall under the purview of the State, the Centre was encroaching on the powers of the State in imposing restrictions on such markets.
- Such an attempt is an attack on the federal structure and secular principles enshrined in our Constitution of India.

#### 31. No decision to exclude buffalo from 'cattle'

#### In news:

- Central government: No decision for any modification in the definition of 'cattle' to exempt buffaloes from the purview of new central rules.
- The new rule prohibit sale of cows, bulls, bullocks, buffaloes, steers, heifers, calves and camels for slaughter or sacrifice in livestock markets.
- Under the rules, the definition 'cattle' includes cows, buffaloes, bulls, bullocks, steers, calves & camels.

#### 32. Madras HC stays new curbs on cattle trade

#### In news:

- The Madras High Court Bench stayed the operation of Rules 22(b)(iii) and 22(e) of the Prevention of Cruelty to Animals (Regulation of Livestock Market) Rules 2017 notified by the Centre.
- The new rules ban the sale of bulls, bullocks, cows, buffaloes, steers, heifers, calves and camels for slaughter in 'animal markets.'
- Public interest litigation: Interim stay granted for a period of four weeks on a public interest litigation petition filed by S. Selvagomathy, an activist-cumlawyer.

#### Challenges posed in the PIL:

- Constitutional validity of the 2017 Rules.
- · Legislative competence of the Centre to frame rules
- Matter related to slaughter of animals is concerned, it is exclusively in the State list.

#### 33. Commercial e-vehicles won't need permits

#### In news:

- Permits not required for commercial purpose electric vehicles such as taxis, auto-rickshaws and buses.
- The road transport ministry is working on this proposal in its bid to push electric vehicles across segments to check air pollution and high dependence on imported crude oil.
- The ministry has already set a similar model by allowing e-rickshaws to ply without getting permit, though they have to be registered and must meet minimum safety requirement.
- Union transport minister Nitin Gadkari and Maharashtra chiefminister Devendra Fadnavis launched the country's first multi-modal electric vehicle project in Nagpur. The pilot project envisages a fleet of 200 electric-powered public transport vehicles which would be run on cab aggregator Ola's app platform in Nagpur.

# ECONOMY

#### 1. Excess liquidity prompts banks to cut deposit rates

#### What's in news?

- Public sector lenders like State Bank of India (SBI) and Bank of Baroda have reduced interest on fixed deposits on various maturities from the end of April as the banking system is flush with liquidity.
- SBI, the country's largest lender, reduced the retail term deposit rate (for up to 1 crore) by 25-50 basis points (bps) on various maturities. (100 bps = 1 percentage point).
- According to Reserve Bank of India, the surplus liquidity in the banking system was 4.8 lakh crore in March, though it has come down from its peak of 8 lakh crore in January.
- In early January, banks had reduced the benchmark lending rate the marginal cost of funds based lending rate sharply, by about 90 bps.
- The move followed demonetisation which resulted in significantly high mobilisation of low-cost deposits.
- Banks had not reduced deposit rates at that time and now they have not cut their lending rates.

#### 2. M.P. shifts fiscal year

#### What's in news?

- Madhya Pradesh will be the first State to switch to the January-December financial year from the present April-March cycle.
- The change will mean the financial year will coincide with the calendar year.
- It is believed that such a switch could have a significant impact on the economy.

#### 3. Govt. quizzed on insurance for farmers

#### What's in news?

- The Supreme Court while looking into farmers' suicides, the various reasons behind the tragedy, including bad debts and vagaries of nature has questioned the government policy on the fate of insurance schemes provided to farmers.
- Question: Whether the entire claim money would be forfeited, with the farmers getting nothing, in case he is unable to pay an instalment.
- Why did the question arose: The query came after Additional Solicitor General P.S. Narasimha submitted that the insurance provided to farmers has seen a "sea change" at the ground level.
- Mr. Narasimha also said that the budgetary allocation devoted to protect the farmer is like "never before".

#### 4. India to unveil new IIP series

#### What's in news?

- India will unveil a new series of Index of Industrial Production with a base year 2011-12 on May 9
- Main Aim: To map economic activities more accurately.
- Currently, the IIP is calculated on base year of 2004-05.

#### Index of Industrial Production:

- The Index of Industrial Production (IIP) is an index for India which details out the growth of various sectors in an economy such as mining, electricity and manufacturing.
- The all India IIP is a composite indicator that measures the short-term changes in the volume of production of a basket of industrial products during a given period with respect to that in a chosen base period.
- It is compiled and published monthly by the Central Statistical Organisation (CSO) six weeks after the reference month ends.
- The Eight Core Industries comprise nearly 38 % of the weight of items included in the Index of Industrial Production (IIP).
- These are Electricity, steel, refinery products, crude oil, coal, cement, natural gas and fertilisers.

#### 5. Package to resolve NPAs gets Cabinet nod

#### What's in news?

- The government cleared a package to resolve the persistent rise in non-performing assets that are plaguing public sector banks and denting credit growth.
- The package includes an ordinance to amend the Banking Regulation Act of 1949 to empower the Reserve Bank of India to take more actions to check bad loans

#### Key fact:

- Bad loans in the Indian banking system have gone up sharply in the last one year.
- Reserve Bank of India data:
- Gross NPA, as a percentage of gross advances went up to 9.1% in September 2016 from 5.1% in September 2015.
- During the same period, stressed assets (which is gross NPA plus standard restructured advances and write-offs), moved up from 11.3% to 12.3% and some estimates suggested it had doubled since 2013.

- Public sector banks share a disproportionate burden of this stress. Stressed assets in some of the public sector banks have approached or exceeded 20%.
- Some estimates suggest the total stress in the Indian banking system is about Rs 14 lakh crore.

#### Other measures:

- The Union Cabinet also kicked off the disinvestment process for hotels owned by the India Tourism Development Corporation (ITDC). The government's stakes will be offloaded in Ashok Hotels in Bharatpur, Guwahati and Bhopal.
- Policy to give "preference to domestically manufactured iron and steel products" for government's infrastructure projects
- The Centre also approved a National Steel Policy 2017 aimed at attracting Rs 10 lakh crore investments in the steel sector by 2030-31.
- A central sector scheme, SAMPADA was approved with an allocation of Rs 6,000 crore in a bid to decrease agrowaste and modernise processing.

#### 6. Multi-modal transport policy on the anvil

#### What's in news?

- Highlights of Integrated Transport and Logistics Summit
- The Centre will soon frame a policy on integration of various modes of transport aimed at smooth transition of cargo.
- Proposal to setup a single company for multi-modal transportation of cargo. This one integrated company can provide end-to-end logistic solution to our customers
- Main focus to be on the integration of roads, ports, waterways and airways.

#### Key Fact:

- India's reliance on roads is three times more than China's.
- Logistics costs were high in India almost 4% of our GDP and pegged at 5% by 2020.

### 7. <u>Govt gives wide-ranging powers to RBI to deal with bad</u> <u>loans</u>

#### What's in news?

- President Pranab Mukherjee promulgated Ordinance to amend the Banking Regulation Act.
- · What does the Ordinance seeks to provide?
- Banking Regulation Act gives legislative powers to the RBI to issue directions to lenders (banking company or banking companies) to initiate insolvency proceedings for the recovery of bad loans under the provisions of INSOLVNCY AND Bankruptcy code (IBC), 2016.
- · Empowered RBI to issue directions to banks for

resolution of stressed assets.

- Empower RBI to set up sector related oversight panels that will shield bankers from later action by probe agencies looking into loan recasts.
- RBI has been equipped with powers to specify one or more authorities to advise banks for dealing with the problem of NPAs, that have reached unacceptably high levels and urgent measures are required for their resolution.

#### Key Fact:

- Non-performing assets (NPAs) or bad loans of public sector banks (PSBs) have reached "unacceptably high levels" of over Rs 6 lakh crore
- The bulk of NPA's are in sectors such as power, steel, road infrastructure and textiles.
- Banks have been reluctant to resolve NPAs through settlement schemes or sell bad loans with hair cut to asset reconstruction companies for fear of 3Cs -- CBI, CAG and CVC.

#### Ordinance effectiveness:

- The Ordinance will ensure effective use of IBC 2016 for resolution of stressed assets and give a big boost to the government's efforts to cut down NPAs in the banking sector.
- With the enactment of amendment via ordinance, RBI will be able to give specific solutions with regard to hair cut for specific cases.

#### 8. New terms for PSBs seeking capital: FM

- Finance Minister hinted at more measures that the government is working on to resolve bad loans that will be announced shortly.
- Public sector banks seeking fresh capital from the Centre would have to commit to reform their own operations and take immediate steps to improve their balance sheet position.
- The lenders will also have to close unprofitable branches and put in place stronger systems for credit appraisals and management of non-performing assets (NPAs).
- Government is planning a process of signing memorandums of understanding with public sector banks which seek capitalisation.

#### 9. Time for a digital Indian Rupee

- With a dream to place India on the digital India scene, the nation is starting to comprehend transformative plan like demonetisation by the legislature.
- Advanced exchanges have taken off with Net keeping money, charge cards, computerized wallets, installment portals, Aadhaar pay, PPI, UPI, installments bank and BHIM since demonetisation.
- The digital fiat cash works in an indistinguishable path from do notes and coins. By uprightness of its

computerized nature, it can possibly be the most monetarily comprehensive instrument.

• Any individual in India can hold it, exchange it and utilize it to settle obligations, be it a rancher living in Gahmar town in U.P. or, on the other hand a salaried individual in Mumbai, with or without a financial balance.

#### Advantages :

- It would have two additional advantages over paper notes and coins. It would transcend time and space, i.e. it could be transacted remotely between two parties. And, it would be counterfeit-proof!
- First, the advanced technology would prevent any fraud. Also, any counterfeit with a single rupee could be detected immediately without hurting circulation.
- The digital currency would bring more innovation, competition, better consumer protection, more consumer choices, more open access and better regulatory transparency. It would create a 'firewall' between banking and digital payment systems, protecting bank accounts and information on digital systems.
- Since digital India Rupee would be a centrally-issued sovereign currency, it would possess immense trust, security and control. It would also bring transparency on black money, tax evasion and other illicit activities under the legal framework. Also, with the negligible logistics costs and benefits of riding on existing infrastructure, the cost of digital India Rupee would be marginal.
- India's cash-to-GDP ratio is 12.04%. The transition from physical notes and coins to a digital currency could drastically bring this down at par with the rest of the world.

#### 10. Centre to raise with U.S. non-tariff barriers

#### What's in news?

- India is planning to take up with the Trump administration the barriers" imposed by the U.S., which are hurting Indian goods exports to that country in sectors including agriculture, pharmaceuticals and other industrial products.
- The issue would be the agenda of the next India-U.S. Trade Policy Forum (TPF) — the main bilateral platform for discussing and resolving trade and investment issues.
- U.S. "non-tariff/Sanitary & Phyto-Sanitary (SPS) barriers:
- The U.S. non-tariff/Sanitary & Phyto-Sanitary (SPS) barriers include those imposed under laws concerning bio-terrorism, child-labour, national security, 'Buy America' norms preferring U.S.-made items
- American suppliers in U.S. Government purchases, registration fee hikes (in sectors such as pharma), food safety as well as animal and plant health regulations.

#### Various protectionism measures:

- Child labour: According to the Indian Commerce Ministry, the U.S. Department of Labor (DOL) has arbitrarily listed 23 items produced in India on the 'List of Goods Produced by Child Labour or Forced Labour' — which is in effect a ban on their import.
- X-ray scanning of containers: The Ministry has also referred to the U.S. Government measures envisaged within an initiative to counter potential terrorist threats to the international maritime container trade system.
- X-ray scanning of containers cause additional costs for Indian exporters across sectors.
- The Trade Expansion Act of 1962 of the U.S.: allowing American manufacturers to petition for curbing imports from third nations on national security grounds without providing proof from industry. This move restricts foreign competition.
- Pharma exports: increase in registration fees, approval delays and low approval rates for registrations mandatory for sale of all new drugs in the U.S. Ayurveda and traditional Indian medicines are hit by the U.S. requirement of clinical trials while the practice of traditional Indian medicine systems such as Siddha and Unani are not allowed by the U.S. Federal Government.

#### Agricultural commodities:

- U.S. Environmental Protection Agency registers, approves and fixes a tolerance level for certain pesticide residues. Indian Basmati Rice exports will be hurt owing to import alerts due to the presence of such pesticide residues.
- U.S. requirement of irradiation treatment and inspection of mangoes prior to shipping from India. It is a time-consuming and costly certification process hurting the competitiveness of Indian mangoes in the U.S. market. Indian grapes, litchis, pomegranates, honey, marine and meat products are also impacted.
- The U.S. has imposed countervailing duties on Indian exports, including those by steel and paper industries.

#### 11. Tax processed foods: FSSAI panel

#### What's in news?

- A committee of medical experts and nutritionists has recommended a tax on "highly-processed" foods and sugar-sweetened beverages.
- The body, tasked by the Food Standards and Safety Authority of India (FSSAI), which is a Union Health Ministry body, has also advocated :
- Ban on advertisements promoting foods high in FSS (fat, salt, sugar) during TV shows and channels aimed at children.
- A progress towards a total ban, as being done in a few other countries like Chile is the need of the hour.



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- Celebrity endorsements of such foods need to be discouraged.
- Study on urban populations: Low Income Groups (LIG) reportedly consumed more fried snacks and sweets than High Income Groups (HIG) and, the highest consumption of bakery items was in slums

#### Detailed labels must:

- All packaged food carry detailed labels specifying the energy value in kcal (kilo calories); the amounts of protein, carbohydrates and fat; and the amount of any other nutrient for which a nutrition or health claim is made.
- If relevant, the label should also specify the amount or type of fatty acids or the amount of cholesterol, saturated fatty acids, monounsaturated fatty acids and polyunsaturated fatty acids in gram (g) and cholesterol in milligram (mg), the panel said.

#### 12. Rail regulator to define performance standards

#### What's in news?

India's first rail regulator, Rail Development Authority (RDA) functional areas:

- Look at tariff structures for passenger and freight operations
- Set standards of performance and efficiency enforceable under the Railways Act.
- RDA defined standards of performance and efficiency ,would be notified as rules under the Railway Act to give a binding force upon acceptance
- RDA would be authorised to check for deviations and suggest remedial measures
- The regulator will provide guidance on quantity and quality of service provided to passengers. These may include setting standards including hours of service, frequency of trains, capacity per coach, cleanliness level, and quality of water, food, furnishing and linen.

#### RDA's non-functional areas:

- The regulator will, however, not involve itself in policy making of the Indian Railways, operations and maintenance of the rail system, financial management, setting technical standards and compliance of safety standards, the resolution said.
- Regulator would only make recommendations on tariff and not impose a tariff on the Indian Railways.

#### Regulator's structure:

• The Railway Board also defined the structure of the RDA with a Chairman along with three members each for tariff, public private partnership and efficiency, standards and benchmarking.

#### 13. Centre to release new series of IIP, WPI data

#### What's in news?

- A new series of Index of Industrial Production (IIP) and Wholesale Price Index (WPI) will be released.
- Main motive is to bring greater accuracy and improved synchronisation among data sets, in turn leading to better policies.
- Base year revised: The base year for the IIP and the WPI will be 2011-12 and not the current 2004-05. The Consumer Price Index (CPI) and the Gross Domestic Product (GDP) and gross value addition also have 2011-12 as the base year.
- The new series of IIP will include technology items such as smart phones, tablets, LED television and tablets.
- The new WPI series will include toys and games as a separate group.

#### 14. Revised data shows IIP growing faster, WPI easing

#### What's in news?

- The main change made to the two indices is that the base year has been shifted from 2004-05 to 2011-12 in order to make the data more contemporary and reflective of ground realities.
- The international recommendation is for a revision of these indices every five years
- The purpose of these changes is to align WPI with GDP and IIP, and hence the 2011-12 base year has been taken.
- The other change is that the WPI will no longer incorporate indirect taxes, which means they will be insulated from policy changes.
- Previously, the WPI was calculated on the basis of the base price plus excise duty minus any trade discount. The new formula removes the excise duty aspect.

#### 15. Boost for defence manufacturers

#### What's in news?

 Defence Minister Arun Jaitley held consultations with representatives of Chambers of Commerce and Industry (CII) on the proposed Strategic Partnership (SP) model meant to promote the private sector in defence manufacturing.

#### Strategic Partnership (SP) model advantages:

- Enhance competition
- Increase efficiencies
- Facilitate faster and more significant absorption of technology
- Create a tiered industrial ecosystem
- · Ensure development of a wider skill base
- Trigger innovation and enable participation in global value chains as well as promote exports.

#### Modalities of the model:

- Government intends to boost private sector participation and create domestic expertise in four key areas, namely, fighter aircraft, helicopters, submarines, and armoured vehicles and main battle tanks.
- Technology transfer: One company would be selected for each area based on its competence, which would then tie up with the foreign Original Equipment Manufacturer selected through the procurement process, to build the platform in India with significant technology transfer.

#### Army apprehensive:

- SP model would block new technology and new players coming to the defence sector.
- On the other hand, existing defence players argue for committed orders for the next 30 years to give them the economies of scale as defence involves large investments.

#### 16. 'Foreign food retailers can sell non-foods too'

#### What's in news?

- Centre is expected to pave the way for multibrand foreign retailers to tap the Indian market, by allowing overseas investors in the food retail segment to offer 'Made in India' non-food items.
- India had opened up 100% FDI in multibrand food retail and food processing sectors in early 2016.
- Investors had also pointed out that multibrand food retail ventures entailed a lot of investment in infrastructure but the margins had to be really small as one could not be viable with big margins on food.

#### 17. 'National Employment Policy this year'

#### What's in news?

- The Centre to frame a new sector-wise National Employment Policy in this financial year.
- Policy's thrust would be to ensure a transition from informal to formal jobs in the country.
- At present, in India, around 92% of the workers are engaged in informal employment — those who are not covered by any social security law.
- · Labour Bureau- quarterly survey of industries
- The pace of job creation fell to a six-year low in 2015 with 1.35 lakh new jobs being created compared with 4.21 lakh new jobs in 2014 and 4.19 lakh in 2013.
- Another survey Fifth Annual Employment-Unemployment Survey – of households conducted by Labour Bureau showed unemployment rate rising to a five-year high of 5% in 2015-16 compared with 4.9% in 2013-14 and 4.7% in 2012-13.

#### Reasons for job loss in IT sector:

• U.S. President Donald Trump's executive order issued

last month to review the H1-B visa program, which aims at tightening visa norms for skilled workers and technology shifts.

• Whole industry is going ahead with automation as a result of which the manpower requirement is going down.

#### Previous attempts:

- A National Employment Policy was planned by the United Progressive Alliance (UPA) government but a draft Policy was released on June 16, 2014 when the NDA government took charge at the Centre.
- A two-page document, it talked about providing skill development in the unorganised non-farm sector such as construction.

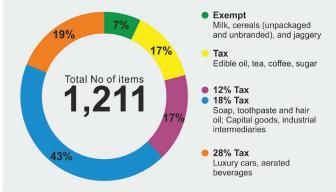
#### 18. GST Council sets rates for most commodities

#### What's in news?

 The Goods and Services (GST) Council agreed on the fitment finalized the tax rates of almost all commodities in the various tax slabs under the new indirect regime to be rolled out on July 1. Exemption List:

#### Fitting to GST tax slabs

Fitment for more than 1,200 items within GST tax slabs were decided on Thursday but for six categories including cigarettes, footwear and gold



Commodity	Rates
Sugar, tea, coffee (except instant), and edible oil	5%
Common use items such as soap, toothpaste, and hair oil	18%
Coal	5%
Consumer durables	28%
Capital goods and industrial intermediaries	18%.
Small petrol and diesel cars (small petrol cars attracting a cess of 1% and small diesel cars 3%.)	28%
Luxury cars( additional15% cess)	28%

#### **Exemption List:**

• Milk, cereals (unpackaged and unbranded), and jaggery.

#### 19. Kidnap insurance may help recoup cyberattack losses

#### What's in news?

- Companies without cyber insurance are dusting off policies covering kidnap, ransom and extortion in the world's political hotspots to recoup losses caused by ransomware viruses such as "WannaCry".
- Cyber insurance can be expensive to buy and is not widely used outside the U.S
- The kidnap policies, known as K&R coverage, are typically used by multinational companies looking to protect their staff in areas where violence related to oil and mining operations is common, such as parts of Africa and Latin America.

#### 20. Fugitive economic offenders bill out in public domain, feedback sought

#### What's in news?

- The draft Fugitive Economic Offenders Bill, 2017: It will empower the government to confiscate any property in India owned by economic offenders and defaulters who flee India
- Also, at the discretion of any court, such person or any company where he is a promoter or key managerial personnel or majority shareholder, may be disentitled from bringing forward or defending any civil claim
- The proposed law will be applicable in cases where value of offences is over Rs 100 crore

#### **Provisions of the Bill:**

 The Bill makes provisions for a court of law — Special Court under Prevention of Money Laundering Act — to declare a person a fugitive economic offender

#### Who is a fugitive economic offender?

 He/she is a person who has an arrest warrant issued in respect of a scheduled offence and who leaves or has left India so as to avoid criminal prosecution, or refuses to return to India to face criminal prosecution

#### 21. <u>Cabinet approves Industry-Academia Collaborative</u> <u>Mission for accelerating discovery research to early</u> <u>development for biopharmaceuticals</u>

#### About the Mission:

- Aims to accelerate discovery research to early development for biopharmaceuticals
- The Mission will be implemented by Biotechnology Industry Research Assistance Council (BIRAC) – a Public Sector Undertaking of Department of Biotechnology (DBT)
- · The Mission Program would be a Pan-India program

#### Key Focus areas:

- The key focus areas of the program would aid in preparing India's technological and product development capabilities in the biopharmaceutical sector
- Aims to transform the health standards of India's population through affordable product development

#### Funding:

- Total project cost to be funded by Government of India is Rs. 1500 crore for five years
- 50% cost for the Mission Programme will be arranged through the World Bank loan

#### Agencies involved:

- For the implementation, a Programme Management
   Unit will be set up at BIRAC
- This will work as an operational and functional arm that oversees and monitors program implementation and progress

#### Focus of the Mission:

- The Mission will focus on Development of specific products – vaccines, bio therapeutics, medical devices and diagnostics
- There will be establishment of shared infrastructure and facilities; building and strengthening domain specific knowledge and management skills
- Focus is on creating and enhancing technology transfer capabilities in public and private sector.

#### 22. Modi launches new projects in Kutch, Gujarat

#### What's in news?

- Prime Minister Narendra Modi launched new projects at Kandla Port Trust.
- To boost India's international trade, Kandla Port will soon be connected with Chabahar port in Iran, which is being developed with India's participation.
- Knadla port to be renamed as Deendayal Port Trust to as part of Pt Deendayal Upadhyay's centenary celebrations.
- P.M. said development multi-modal transport system is a must to connect ports with railway networks for seamless movements of cargo.
- <u>Key fact</u>: Kandla Port Trust is the largest cargo handling port in the country

#### 23. World's smallest nation ratifies Solar Alliance Pact

#### What's in news?

 The world's smallest republic, the tiny island nation of Nauru — has become the sixth country to ratify the International Solar Alliance (ISA) Framework pact initiated by the Indian and French governments at the climate change summit held at Paris in 2015.

- Five more African nations Comoros, Cote d'Ivoire, Somalia, Ghana and Djibouti — have committed to sign the Solar Alliance pact during the ongoing meeting of the African Development bank in India.
- Headquartered in India, the alliance conceived as a coalition of solar resource rich countries to collaborate on meeting their energy needs through a common, agreed approach, will become a legal entity once at least 15 countries ratify and deposit the framework agreement.
- India has earmarked about \$2 billion to finance solar projects in Africa out of it commitment to provide \$10 billion of concessional lines of credit for projects in the continent.

#### 24. Cabinet nod for phasing out FIPB

#### What's in news?

- The union Cabinet approved phasing out of the 25year old Foreign Investment Promotion Board (FIPB)
- The decision is aimed at making India more attractive for FDI by improving ease of doing business and promoting the "Maximum Governance, Minimum Government" principle.
- 25. <u>India retains world's highest FDI recipient crown:</u> <u>Report</u>



#### What's in news?

- fDi Report 2017 compiled by FDI intelligence, division of Financial Times Ltd.
- India retained its number one position as the world's top most Greenfield FDI investment destination for the second consecutive year, attracting USD 62.3 billion in 2016, says a report.
- India has remained ahead of China and the US as far as FDI inflows.
- In the year 2016, FDI gravitated to locations experiencing the strongest economic growth, while locations in recession or facing high levels of uncertainty saw major decline.
- China has overtaken the US to become the second biggest country for FDI by capital investment, recording USD 59 billion of announced FDI, compared with USD 48 billion-worth in the US.
- Globally, the real estate sector has claimed the top spot for capital investment.

#### **Basic Information:**

#### **Greenfield investments:**

 A green field investment is a form of foreign direct investment where a parent company builds its operations in a foreign country from the ground up. In addition to the construction of new production facilities, these projects can also include the building of new distribution hubs, offices and living quarters.

#### **Brownfield Investment:**

- Brown field investment, also referred to as "brownfield" is when a company or government entity purchases or leases existing production facilities to launch a new production activity.
- 26. <u>Green writing on wall: OPEC agrees to India plan for</u> joint study

#### What's in news?

#### India-OPEC Institutional Dialogue

- OPEC, the grouping of oil exporting countries, has agreed to India's proposal for setting up a joint working group to asses future scenarios for the oil industry as energy mix in major economies undergo rapid changes due to expansion in renewable sources.
- There is a shift in focus to wind, biomass, electric vehicles, hybrid cars and other alternative fules. All this puts the oil industry at a crossroads and higher crude prices will only act as a catalyst for faster growth of affordable alternative energy technologies.

#### Importance:

 The acceptance of the proposal by the grouping is an indication of India's growing importance in the global oil market due to the combined effect of its hunger for fuel and rapidly expanding green energy capacity.

#### **Basic Information:**

#### **OPEC:**

- Organization of the Petroleum Exporting Countries is an intergovernmental organization of 13 nations as of 2017, founded in 1960 in Baghdad by the first five members (Iran, Iraq, Kuwait, Saudi Arabia, Venezuela), and headquartered since 1965 in Vienna.
- As of 2015, the 13 countries accounted for an estimated 42 percent of global oil production and 73 percent of the world's "proven" oil reserves, giving OPEC a major influence on global oil prices that were previously determined by American-dominated multinational oil companies.
- OPEC's stated mission is "to coordinate and unify the petroleum policies of its member countries and ensure the stabilization of oil markets, in order to secure an efficient, economic and regular supply of petroleum to consumers, a steady income to producers, and a fair return on capital for those investing in the petroleum industry."
- As of January 2017, OPEC's members are Algeria, Angola, Ecuador, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela, while Indonesia is a former member.
- Two-thirds of OPEC's oil production and reserves are in its six Middle Eastern countries that surround the oilrich Persian Gulf.

# **ENVIRONMENTAL SCIENCE AND ECOLOGY**

#### 1. <u>Great Indian Bustard breeding centre to be set up in</u> <u>Kota</u>

#### What's in news?

- India's first captive breeding centre for Great Indian Bustards (GIBs) -- Rajasthan's state bird -- will be set up at Sorsan in Kota district, and a hatchery centre at Nokh in Jaisalmer.
- The Centre had decided last year to set up such centres in Rajasthan considering the declining population of GIBs, listed as critically endangered under the wildlife Act, 1972.
- In natural conditions, the breeding of GIBs is slow and even their survival chances are less, be it due to predators or other reasons.
- To protect the species, the state government is developing additional closures and grasslands, and constructing predator-proof fencing in breeding areas.

#### 2. <u>Inefficient use of power,water in paddy cultivation in</u> <u>Haryana</u>

#### What's in news?

#### Development (CRRID):

- Study was conducted on the subject 'Optimisation of Agriculture Power Subsidy and Irrigation Water Intensity in Haryana',
- Main objective: Assessing efficiency in water utilisation for source wise irrigation and assess implications of source wise irrigation for sustainable growth in agriculture and power sector. Subsidised and unmetered power supply to the farm sector in Haryana is leading to "inefficient" utilisation of groundwater and electricity on paddy cultivation.

#### Highlights:

- An estimated amount of Rs 844 crore is being spent as power subsidy on excess consumption of electricity on the paddy crop in the state.
- An estimated 7.23 million acre feet (MAF) of underground water was extracted to meet excess irrigation for paddy crop, which suggested that water was being utilised in an inefficient manner through electric tube wells.
- Major findings: average number of times of actual irrigations was significantly higher than optimum number of times of irrigations required in most of kharif crops particularly in case of irrigation through electric tube wells.
- During field surveys, the deterioration of quality of soil

was also observed, mainly on account of continuous excess use of chemical fertiliser pesticides and ground water for irrigations.

- <u>Solution</u>: Unmetered power supply promotes inefficiency in electricity consumption as well as utilisation of ground water. There is urgent need to ensure metered supply at consumer ends.
- Subsidised power supply should be targeted to marginal and small farmers and policy of direct benefit transfer may be explored in power subsidy which will require proper metering at consumer ends.

#### 3. Swachh Survekshan 2017: Indore is cleanest city

#### What's in news?

- 'Swachh Survekshan-2017' report
- Indore in Madhya Pradesh is India's cleanest city. Bhopal gets the second position in the cleanliness ranking of 434 cities.
- Gonda in Uttar Pradesh is the dirtiest.

#### STATE WISE:

- Gujarat has the maximum of 12 cities among the top 50 clean cities, closely followed by Madhya Pradesh with 11 and Andhra Pradesh with eight.
- Uttar Pradesh accounted for half of the bottom 50 cities in the cleanliness ranking.

#### 4. Swachh Survekshan-2017 : Criteria and Methodology

#### What's in news?

- Swachh Survekshan-2017 commissioned by the Ministry of Urban Development during January – February, 2017 aimed at capturing the improvement in sanitation scenario, primarily based on making cities and towns Open Defecation Free and improvement in processing of municipal solid waste. Accordingly, it is outcome oriented.
- Criteria and weightages for different components of sanitation related aspects used for the Survey are
- Solid Waste Management including Door-to-Door collection, Processing and Disposal, ODF status etc: 45% of total 2,000 marks i.e 900 marks
- Citizen feedback : 30% i.e 600 of total marks
- Independent observation : 25% i.e 500 marks
- Quality Council of India which conducted the survey deployed 421 assessors for on the spot assessment of 17,500 locations in 434 cities and towns. Another 55 persons regularly monitored the survey process in real time.
- · Field inspection resulted in evidence based reports



on the cleanliness situation with assessors using geotagged devices.

#### 5. Banganapalle mango gets GI tag

#### What's in news?

- The succulent Banganapalle mango has received a Geographical Indication (GI) tag, making Andhra Pradesh the proprietor of the variety known for its sweetness.
- Banganapalle mangoes have been grown for over 100 years in Andhra Pradesh. It also known as Beneshan, Baneshan, Benishan, Chappatai and Safeda.
- The prominent characteristic of Banganapalle mangoes is that their skin has very light spots, stone is oblong in shape and has very thin seed with sparse and soft fibre all over.
- The fruits can retain their quality under cold storage even up to three months.
- A GI tag certifies the origin of a product or produce from a particular region as the quality or other features of the product is attributable only to the place of its origin.
- GI is covered under the Intellectual Property Rights and the Trade Related Aspects of Intellectual Property Rights.
- The tag helps farmers or manufacturers, as the case may be, to get a better price in the market.

#### 6. Japan's men-only island up for World Heritage status

#### What's in news?

- Japan's island of Okinoshima, a men-only ancient religious site in Fukuoka prefecture, to be soon added to the list of World Heritage list.
- The International Council on Monuments and Sites (ICOMOS), notified Japan of its decision.

#### Cultural Practice:

- Okinoshima still follow strict taboos from ancient times, including the controversial ban on women from entering the island .Men setting foot on the island are first required to strip all clothes and perform a cleansing ritual.
- It was also the site of successful exchanges with the people of the Korean Peninsula and China between the fourth and ninth centuries.
- National treasure: Some 80,000 artefact brought as gifts from overseas have been uncovered on the island, including gold rings from the Korean Peninsula and glass cup fragments from Persia.

#### 7. 'Quality of water has improved'

#### Context:

 Highlights of recently carried out survey on water awareness by The World Water Council in major parts of the world, including India.

#### **Highlights:**

- The standard of drinking water in India has improved in the last five years but a lot of work still remains to be done.
- More than one-third of Indians think that not enough is being done to achieve the UN's sustainable development goals to make water and sanitation for all a reality by 2030.
- 31% of Indians said they had been in a situation where it was unsafe to drink water but they had no other choice and suffered from diseases like diarrhoea and gastroenteritis.
- A majority (71%) of Indians said that safe drinking water had improved over the last five years.
- 62% of the Indians said they believed that the government was doing enough to support access to safe drinking water.
- World Water Forum
- The survey was done ahead of the 8th World Water Forum that is scheduled to take place in the Brazilian capital Brasilia in March 2018.

#### **Basic information:**

- World Water Forum
- The World Water Forum is an event focusing on perceived issues surrounding water. It is hosted by the World Water Council and takes place every three years
- World Water Forum aims to:
- Raise awareness with decision makers and the public at large on water issues and, subsequently, to generate action;
- Contribute to improving access to water supply and sanitation and report on progress towards meeting the Millennium Development Goals;[2]
- Provide opportunities to progressively develop shared visions on challenging water issues, to develop new partnerships and to pave the way for cooperation and action among a wide diversity of organisations and individuals;
- Encourage greater media attention for water issues and solutions

#### World Water Council:

- The World Water Council is an international think tank founded in 1996, with its headquarters in Marseille, France.
- It has 341 members (March 2017) which include organizations from the UN and intergovernmental organizations, the private sector (construction, engineering and manufacturing companies), governments and ministries, academic institutions, international organizations, local governments, and civil society groups.

- Founders and constituent members of the World Water Council include the International Commission on Irrigation and Drainage, the International Union for the Conservation of Nature(IUCN), the International Water Association (IWA), Suez Lyonnaise des Eaux, the United Nations agencies UNDP and UNESCO, and the World Bank.
- Its stated mission is "to promote awareness, build political commitment and trigger action on critical water issues at all levels, including the highest decisionmaking level, to facilitate the efficient conservation, protection, development, planning, management, and use of water in all its dimensions on an environmentally sustainable basis for the benefit of all life on earth."
- Every third year the World Water Council organizes the World Water Forum in close collaboration with the authorities of the hosting country.

#### 8. Ahmedabad gets air quality monitors to battle pollution

#### What's in news?

• Ahmedabad civic body is launching a comprehensive Air Quality Index (AQI) and Air Information and Response (AIR) plan in order to effectively battle increasing air pollution.

#### <u>Air Quality Index (AQI) and Air Information and Response</u> (AIR) plan :

- It includes an air pollution alert system and health risk communication, based on real-time data.
- The initiative by the Ahmedabad Municipal Corporation (AMC) focuses on
- Health risk communication
- Immediate and long term actions to reduce the impact of rising air pollution.
- The new air quality monitors installed across the city will collect and report data on smog and toxic pollutants as part of the AQI.
- It will be used to inform residents on when to take precautions and minimise exposure to pollution.
- Initiative involves five key factors
  - \* Health risk communication.
  - \* Inter-agency coordination.
  - \* Increasing capacity of medical professionals and
  - \* Targeted activities for vulnerable groups like school children, senior citizens and
  - \* Adults with heart or lung disease.

#### LED signalling:

- AQI forecast reading 'very poor' air quality (301-400) triggers a health alert that is to be issued by the civic body through its communication channels.
- The alert needs to be displayed in colour-coded messages on a dozen large-size LED screens installed

on city roads, social media platforms and traditional media like newspapers and radio.

#### Global best practice:

 Ahmedabad's AIR plan is based on global best practices on AQI health risk communication from Beijing, Los Angeles, Mexico City and New Delhi.

# **ART AND CULTURE**

#### 4,000 year old model garden found outside Egypt tomb

#### What's in news?

- Archaeologists have discovered the remains of a nearly 4,000-year-old model garden outside a tomb in the ancient Egyptian capital of Thebes.
- The ten foot by seven foot garden consists of equally divided square plots each about a foot across.
- It was found in an open courtyard outside a Middle Kingdom (2050 to 1800 BCE) tomb.

#### **Cultural significance:**

- The garden probably had a symbolic meaning and must have played a role in the funerary rite.
- The tiny square plots seem to have each contained different species of plants and flowers. In the middle there are two elevated spots for a small tree or bush. At one of the corners, the root and the trunk of a 4,000 year old small tree have been preserved to a height of a foot. Next to it, a bowl was found containing dates and other fruits, which could have been presented as an offering.
- In ancient Egypt, the dead were traditionally surrounded by objects they enjoyed in life, so they could continue to enjoy them in the afterlife.
- The team also discovered a small mud-brick temple attached to the tomb containing three stone slabs, one of which contained a dedication to the Egyptian gods Montu, Ptah, Sokar and Osiris.

# **SCIENCE AND TECHNOLOGY**

#### 1. <u>Moon orbiting solar system's third largest dwarf planet</u> <u>found</u>

#### What's in news?

- that resides in the frigid outskirts in our solar system.
- <u>Key Findings:</u> most of the known dwarf planets in the Kuiper Belt larger than 965 kilometers across have companions.
- These bodies can provide some insight into how moons formed in the young solar system.
- <u>Basic information</u>: The Kuiper Belt: The Kuiper Belt is a disc-shaped region of icy bodies - including dwarf planets such as Pluto - and comets beyond the orbit of Neptune. It extends from about 30 to 55 AU and is probably populated with hundreds of thousands of icy bodies larger than 100 km (62 miles) across and an estimated trillion or more comets. The first Kuiper Belt Object was discovered in 1992.
- **Dwarf planet:** A dwarf planet is a planetary-mass object that is neither a planet nor a natural satellite. That is, it is in direct orbit of the Sun, and is massive enough for its gravity to crush it into a hydrostatic equilibrium shape (usually a spheroid), but has not cleared the neighborhood of other material around its orbit.
- The International Astronomical Union (IAU) currently recognizes five dwarf planets: Ceres; Pluto; Haumea; Makemake; and Eris.

#### 2. on Mars, feed astronauts

#### What's in news?

- National Aeronautics and Space Administration (NASA) scientists have designed an inflatable greenhouse that astronauts could one day use to grow fresh food and produce oxygen on Mars or Moon.
- The prototype involves an inflatable, deployable greenhouse to support plant and crop production for nutrition, air revitalisation, water recycling and waste recycling.

#### How it works?

- Astronauts exhale carbon dioxide, which is introduced into the greenhouse, and the plants then generate oxygen through photosynthesis.
- The water cycle begins with water that is brought along or found at the lunar or Martian landing site. Water is oxygenated, given nutrient salts, and it continuously flows across the root zone of the plants and returned to the storage system.

#### 3. <u>India successfully launches South Asia Satellite, "gift"</u> <u>to neighbors</u>

#### What's in news?

- India successfully launched a South Asia Satellite.
- It seeks to provide communications and disaster support to neighbouring countries
- Space initiative described as a "giant and historic step" in boosting regional cooperation.

#### Key fact:

• Mr. Modi had proposed the plan for the shared satellite as a gift to the neighbourhood, during the SAARC summit in Kathmandu in 2014.

#### • The South Asian Satellite (SAS):

- \* India's new age space diplomacy.
- \* The project is funded entirely by India.
- \* Mission life is 12 years.
- Range of services: telecommunication, television, direct-to-home, VSATs, tele-education and telemedicine.
- \* Members- India, SriLanka, Bhutan, Afghanistan, Bangladesh, Nepal and Maldives. Pakistan has opted out of the project.

#### 4. NASA missions on solar system

#### What's in news?

 A new mission to Saturn's moons Titan or Enceladus to find signs of life beyond Earth cannot be ruled out as NASA says it is reviewing 12 proposals for future unmanned solar system mission to be launched in the mid-2020s.

#### 5. Rain may have shaped Mars surface

#### What's in news?

#### New Study findings:

- Mars has geological features like the Earth and the Moon, such as craters and valleys, many of which were formed through rainfall
- Heavy rain on Mars may have reshaped the Red planet's impact craters and carved out river-like channels on its surface billions of years ago
- Changes in the Martian atmosphere made it rain harder and harder, which had a similar effect on the planet's surface as seen on Earth.
- Valley networks on Mars show evidence for surface runoff driven by rainfall.
- There is a growing body of evidence that there was

once water on Mars.

#### Atmospheric pressure and Rain fall:

- When Mars first formed 4.5 billion years ago, atmosphere pressure was very high.
- This pressure influences the size of the raindrops and how hard they fall.
- During the initial stages, water droplets would have been very small, producing something like fog rather than rain.
- As the atmospheric pressure decreased over millions of years, raindrops got bigger and rainfall became heavy enough to cut into the soil and start to alter the craters. The water could then be channelled and able to cut through the planet's surface, creating valleys.

#### 6. Australian scientists create world's thinnest hologram

#### What's in news?

- Scientists have created the world's thinnest hologram that can be seen without 3D goggles and may be integrated into everyday electronics such as smartphones, computers and TVs
- It is simple to make and is 1,000 times thinner than a human hair
- Integrating holography into everyday electronics would make screen size irrelevant
- A pop-up 3D hologram can display a wealth of data that does not neatly fit on a phone or watch.

#### 7. Ecological concerns over combustible ice

#### Context:

- Japan and China successfully extracted the material from the sea floor off their coastlines
- Commercial development of the globe's huge reserves of a frozen fossil fuel known as "combustible ice" has moved closer to reality
- The fuel was successfully mined by a drilling rig operating in the South China Sea

#### What is combustible ice?

- Combustible ice is a frozen mixture of water and concentrated natural gas.
- Technically known as methane hydrate, it can be lit on fire in its frozen state.
- It is believed to comprise one of the world's most abundant fossil fuels.

#### Issues:

- Experts suggest large-scale production remains many years away.
- If extraction is not done properly, it could flood the atmosphere with climate-changing greenhouse gases.
- Advantages of methane hydrate:

- For Japan, methane hydrate offers the chance to reduce its heavy reliance of imported fuels if it can tap into reserves off its coastline.
- In China, it could serve as a cleaner substitute for coalburning power plants and steel factories.
- These factories have polluted much of the country with lung-damaging smog.

#### Location of methane hydrate:

- Methane hydrate has been found beneath seafloors and buried inside Arctic permafrost and beneath Antarctic ice.
- It is present in abundance in the world.
- This means methane hydrate reserves could meet global gas demands for 80 to 800 years at current consumption rates.

#### Environmental concerns:

- If methane hydrate leaks during the extraction process, it can increase greenhouse gas emissions.
- The fuel also could displace renewables such as solar and wind power.

#### 8. <u>Ministry of Earth Sciences to launch 'Deep Ocean</u> <u>Mission' by January 2018</u>

#### What's in news?

- Ministry of Earth Sciences, Government of India is all set to launch 'Deep Ocean Mission' by January 2018.
- The program on Poly metallic nodules was initiated at CSIR-NIO with the collection of the first nodule sample from Arabian Sea on board the first Research Vessel Gaveshani on 26 January 1981.
- India was the first country in the world to have been given the Pioneer Area for exploration of deep-sea mineral viz. Polymetallic nodules in the Central Indian Ocean Basin in 1987.
- This was based on the extensive surveys carried out by the scientists of CSIR-NIO, on several research ships leading to the allocation of an area of 150,000 sq km to the country with exclusive rights under the UN Law of the sea.
- India has now retained an area of 75,000 sq km with an estimated resource of about 100 million tons of strategic metals such Copper, Nickel, Cobalt besides Manganese and Iron.
- A First Generation Mine-site (FGM) with an area of 18,000 sq km has been identified. Latest technologies for extraction of metals from the minerals have also been developed under the programme. Detailed environmental data has been collected for compliance with International Seabed Authorities requirements. Besides identifying the mineral resource and developing technologies for mining and extraction, the programme has also resulted in high impact research as



well as manpower development.

#### 9. Primitive hominids lived alongside modern humans

#### What's in news?

- New research observations :
- Primitive hominids may have lived in Africa at the same time as humans
- New findings that could change the understanding of human evolution.
- Fossils found deep in South Africa's Rising Star cave complex in 2013 have been dated by several expert teams with their findings suggesting the hominids, called Homo naledi, may have lived alongside Homo sapiens.
- It had earlier been thought that the hominids were millions of years old.
- Homo naledi is found to be aged between 2,36,000 and 3,35,000-years-old — the beginning of the rise of modern human behavior.

#### 10. Blood group may predict heart attack risk: study

#### What's in news?

- A new study by researchers analysed the association between blood group and coronary reveals the following notable informations-
- People having a non-O blood group such as A, B or AB may be at an increased risk of suffering a heart attack {9 per cent increased risk of coronary events and a 9 per cent increased risk of cardiovascular events, especially myocardial infarction (heart attack)
- Researchers found that the odds ratio (OR) for all coronary events was significantly higher in carriers of A blood group.
- The OR for combined cardiovascular events was significantly higher in non-O blood group carriers.
- The higher risk for cardiovascular events in non-O blood group carriers may be due to having greater concentrations of von Willebrand factor a blood clotting protein.
- Non-O blood group carriers, specifically those with an A blood group, are known to have higher cholesterol. And galectin-3 protein, which is linked to inflammation and worse outcomes in heart failure patients, is also higher in those with a non-O blood group.
- Blood group should be considered in risk assessment for cardiovascular prevention, together with cholesterol, age, sex and systolic blood pressure.

#### What is an Odds ratio?

 An odds ratio (OR) is a measure of association between an exposure and an outcome. The OR represents the odds that an outcome will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure.

#### 11. Institute to tap gut microbes for drugs

#### What's in news?

- CSIR-Institute of Microbial Technology, Chandigarh (IMTech), is working on a programme to tap its vast collection of microbial samples and develop therapeutic products or drugs.
- The global probiotics (or beneficial bacteria) industry has already started using certain species of bacteria as healing or curative agents. Mother Dairy, Amul, Danone Yakult, and Nestle India are among the leading producers of probiotic functional foods and beverages in India.
- Their foods use lactobacilli and bifidobacteria to make yoghurt, curd, and several dietary supplements.
- Evidence suggests that atherosclerosis, obesity, intestinal problems, and many psychological disorders lead to distinct changes in the composition of bacteria in the gut. Restoring balance or teasing out how the byproducts of these organisms lead to chemical changes that cause disease, is at the heart of research.

#### Key Fact:

- The human body is estimated to have about 35 trillion cells, and about two to three times as many microbial organisms.
- Most of them live in the gastrointestinal tract, which is home to around 3,000-4,000 species of bacteria, not including viruses and other life forms.
- · Some are harmful and many, not.

#### 12. <u>NASA's inflatable greenhouse could produce oxygen</u> <u>Researchers develop synthetic soft retina</u>

#### What's in news?

- Scientists from the University of Oxford have developed a synthetic, soft tissue retina that closely mimics the natural retinal process.
- Helps to treat degenerative eye conditions such as retinitis pigmentosa. The condition changes how the retina responds to light, causing people to slowly lose vision.
- Until now, artificial retinal research has used mostly rigid, hard materials.

#### Synthetic soft retina:

- The synthetic, double-layered retina replica consists of soft water droplets (hydrogels) and biological cell membrane proteins.
- Designed like a camera, the cells act as pixels, detecting and reacting to light to create a grey scale image.
- The synthetic material can generate electrical signals, which stimulate the neurons at the back of our eye just like the original retina.

#### Basic information: Retina

 The retina sits at the back of the human eye, and contains protein cells that convert light into electrical signals that travel through the nervous system, triggering a response from the brain, ultimately building a picture of the scene being viewed.

#### 13. Novel molecule to treat cancer

#### What's in news?

- A novel small molecule, designed and synthesised by Indian researchers, has shown promise in targeted killing of cancer cells.
- The molecule (Disarib) works by binding itself to a protein called BCL2, which suppresses the death of cancerous cells. While BCL2 protein is produced in excess in cancer cells, its expression is almost undetectable in normal cells. Hence, Disarib targets and kills only cancer cells while sparing normal cells.

#### Mechanism:

- Inside a cell there is always a balance between proteins that promote cell death (apoptosis) and those that suppress cell death. When the proteins BAX and BAK that promote cell death get bound to BCL2, cell death is suppressed and cancer cells are able to live longer.
- Disarib was able to disrupt the binding of BCL2 and apoptosis-causing BAK protein. This action induced the death of cancer cells.

#### 14. <u>Babies From Skin Cells? Prospect Is Unsettling to</u> <u>Some Experts</u>

#### What's in news?

- A new revolution in reproductive technology is on the horizon (far more controversial than in vitro fertilisation).
- In vitro gametogenesis or IVG: New reproductive technology-scientists will likely be able to create a baby from human skin cells that have been coaxed to grow into eggs and sperm and then used to create embryos that can be implanted in a womb.
- IVG, so far has been used only in mice.
- With IVG, two men could have a baby that was biologically related to both of them, by using skin cells from one to make an egg that would be fertilized by sperm from the other.
- Women with fertility problems could have eggs made from their skin cells, rather than go through the lengthy and expensive process of stimulating their ovaries to retrieve their eggs.
- **Designer babies:** One man can provide both the eggs and the sperm, almost like cloning himself. Eggs becoming so easily available would lead to designer babies.
- 'Brad Pitt scenario'- when someone retrieves a celebrity's skin cells from a hotel bed or bathtub.

• IVG may raise the spectre of 'embryo farming' on a scale currently unimagined, which might exacerbate concerns about the devaluation of human life.

#### 15. India's first uterine transplant performed

#### What's in news?

- A team of 12 doctors at the Pune's Galaxy Care Laparoscopy Institute (GCLI) successfully completed the highly complex and delicate procedure of India's first uterine transplant on a woman from Solapur district.
- The woman suffers from congenital absence of uterus and is to be fitted with her mother's womb to enable her to conceive normally.
- The operations are meant to help women who want to conceive but cannot because they were born without uterus, suffered damage to it or had to have it removed.

#### Uterus transplant technique:

- Still in its nascent, experimental stage, only a handful of these operations have met with success in other countries, primarily in Sweden.
- · Risk involved: Organ rejection.

#### 16. Scientists bring 'limitless' blood supply closer to reality

#### What's in news?

 Scientists have generated blood-forming stem cells in the lab which gives hopes of creating a limitless supply of human blood.

#### Pluripotent stem cell

- Pluripotent stem cells are master cells.
- They're able to make cells from all three basic body layers, so they can potentially produce any cell or tissue the body needs to repair itself. This "master" property is called pluripotency.
- It may help create immune-matched blood cells, derived from patients' cells, for treatment purposes

#### Advantages:

- This step opens up an opportunity to take cells from patients with genetic blood disorders, use gene editing to correct their genetic defect, and make functional blood cells
- This will also give the potential to have a limitless supply of blood stem cells and blood by taking cells from universal donors
- This could potentially augment the blood supply for patients who need transfusions.

#### 17. Indian researchers develop 3D bioprinted cartilage

#### In news:

- Millions of people around the world suffer from degenerative joint diseases such as arthritis.
- Despite attempting for the last 30 years, scientists across the world have not been able to produce in the lab cartilage-like tissues that are functionally and structurally similar to cartilages seen in human knees and have load-bearing capacity.
- For the first time, Indian researchers have been able to achieve a measure of success in developing cartilages that are molecularly similar to the ones seen in human knees.
- The bioink has high concentration of bone-marrow derived cartilage stem cells, silk proteins and a few factors.
- The chemical composition of the bioink supports cell growth and long-term survival of the cells.
- The cartilage developed in the lab has remained physically stable for up to six weeks

# SOCIAL ISSUES

#### 1. <u>21,000 fine on women using mobile phones in public</u> in U.P. village

#### What's in news?

- New prohibitory orders in a Village in Mathura: Women's are prohibited from using mobile phones in public.
- Fine: ₹2,100 for breaking the above orders.

#### Who made this diktat?

- · A Muslim- dominated village panchayat.
- The diktat is issued by male-only panchayat of Mandora village.
- **Reason given:** It is aimed at preventing girls from eloping with boys.

#### Other measures that were taken:

#### To curb cow-slaughtering:

- Impose a penalty of ₹2.5 lakh on anyone found involved in cow slaughter
- Reward of ₹51,000 was announced for those who provide information about cow slaughter.
- The fine for drinking alcohol in the village was fixed at ₹2,100 and for selling alcohol at ₹1,11,000.

#### Points to be noted:

- Cow- slaughtering banned by a Muslim- dominated village panchayat.
- Reason for banning cow- slaughtering: It hurts the belief of our fellow Hindu brother. The biggest sin in Islam is hurting someone.
- Curbs on women's freedom: it restricts the freedom guaranteed under the Constitution.

#### 2. <u>Dalits, Adivasis, Muslims worst off, says Indian</u> <u>Exclusion Report</u>

#### What's in news?

- 2016 Indian Exclusion Report (IXR)- released by Centre for Equity Studies (CES) in New Delhi
- <u>Crux</u>: Dalits, Adivasis and Muslims continue to be the worst-hit communities in terms of exclusion from access to public goods
- 2016 Report reviews exclusion with respect to four public goods: pensions for the elderly, digital access, agricultural land, and legal justice for under trials.
- The groups most severely and consistently excluded from provisioning tend to the same historically disadvantaged groups: Dalits, Adivasis, Muslims, and persons with disabilities and age-related vulnerabilities

• India's refusal to be a signatory to a non-binding UN Human Rights Council resolution to protect human rights on the Internet indicates reluctance to incorporate a rights-based approach to access.

#### Meagre land holdings:

- The pattern of land distribution "broadly reflects the socio-economic hierarchy — large landowners invariably belong to the upper castes, cultivators to the middle castes, and agricultural workers are largely Dalits and Adivasis.
- The rate of landlessness was highest among Dalits, at 57.3%. Among Muslims, it was 52.6%, and 56.8% of women-headed households were landless. Around 40% of all those displaced by "development activity" were Adivasis.
- Where Dalits, Muslims and women owned land, the holdings were meagre in size, with only 2.08% of Dalit households owning more than two hectares of land. Also, the quality of land owned by Dalits was very poor, with 58% of it having no irrigation facility
- Land reform efforts have not benefited Dalits, women or Muslims significantly
- Land allotments to SC/ST households were often only on paper, as allottees were forcefully evicted or not allowed to take possession

#### **Digital exclusion:**

- 1.063 billion Indians were offline even though India ranks among the top five nations in terms of the total number of Internet users.
- Poverty and geographic location were the two major barriers to digital access, with urban locations enjoying better Internet penetration rates.

#### Internet reach:

- IT access have been riddled with implementation problems like poor infrastructure, a lack of adequate institutional frameworks, low literacy in the targeted areas, and poor cooperation from government officials
- In the new thrust towards a cashless economy, digital exclusion can often also result in financial exclusion.

#### 3. <u>No mutual consent in triple talaq, observes CJI Justice</u> JS Khehar

#### Context:

 constitutional validity of the system of instant divorce in Muslim community (Issue of triple talaq and polygamy).

#### **Observations:**

- The Chief Justice of India, Justice JS Khehar there is no mutual consent in the system of triple talaq.
- Ram Jethmalani abhorred the practice and said the system is in contravention of the Article 14 of the Constitution, which guarantees the right to equality
- Forum for Awareness of National Security- the triple talaq is a method of terminating marriage contract which lies only with men but not with women
- Salman Khurshid judicial review of the matter was not required.
- Additional solicitor general Tushar Mehta put forward government's stand on the issue - the Centre was against triple talaq.
- The apex court made a strong observation as to the practice of triple talaq as it called it the 'worst and undesirable form' of dissolution of marriage among the members of the Muslim community. The court, however, said that the system is considered legal in certain schools of Islam.

#### 4. <u>Will come out with a law if triple talaq struck down:</u> <u>Centre to SC</u>

#### Context:

• triple talaq and polygamy.

#### What's in news?

- The Centre promised to enact a new divorce law for Muslim men if the Supreme Court down all three forms of triple talaq- talaq-e-biddat, talaq hasan and talaq ahasan.
- This was in response to the question -"So if we accept that giving unfettered rights to a husband is bad and we strike down triple talaq, then where will Muslim men go for divorce?" – asked by one of the judge.
- All the tree forms of triple talaq are unilateral, extrajudicial and inequal.
- "Constitutional morality" includes secularism, dignity and non-discrimination.

#### **Attorney General's contention:**

- Issues of Muslim marriage and divorce were separated from religion in Shariat Act way back in 1937.
- Practices of marriage and divorce have been codified as "personal law" under Section 2 of the 1937 Act.
- The Bench has to test them on the touchstone of the fundamental rights of gender equality, gender justice, gender discrimination, human rights, dignity under Articles 14, 15, 21 and 51A of the Constitution.
- But once marriage and divorce is separated from religion, in this case under Section 2 of the 1937 Act, the practices of talaq no more enjoy the protection of Article 25 (freedom of religion) of the Constitution. So

talaq is out of Article 25. Talaq has become 'law' under Article 13 and should be constitutionally moral.

#### 5. 'Triple talaq a matter of faith for Muslims'

#### Context:

Triple talaq and its validity.

#### What's in news?

#### Attorney General of India, Mr. Rohatgi view points:

- Strike down all the three forms of triple talaq as "constitutionally immoral".
- If it's struck down, Centre would then introduce a new law for Muslim divorce.

#### **Defendants views:**

- Instantaneous triple talaq cannot be viewed through the prism of one eye alone.
- Many women in the Hanafi school accept triple talaq as a valid form of divorce.
- Women had not thought about approaching the court for 1,400 years.

#### 6. <u>Muslim law board files affidavit in SC, says 'triple talaq</u> <u>undesirable practice, will issue advisory against it'</u>

#### Context:

· instant triple talaq and dignity of women issue.

#### What's in news?

 All India Muslim Personal Law Board (AIMPLB) resolution: Muslims who resort to instant triple talaq will be socially boycotted by other Muslims.

#### New code of conduct:

- Lays emphasis on a layered settlement of disputes between husband and wife through mutual interaction.
- If the issue is not resolved mutually, then the elder members of both families will intervene.
- If this too does not work, divorce is resorted to as a final option.

#### 7. 'Debate over triple talaq stems from ignorance'

#### Context:

· Should Muslim Personal laws be reformed?

#### What's in news?

- Jamaat-e-Islami Hind released a booklet titled 'Problems Facing Muslim Women and their Solution' to create awareness about Muslim Personal Law awareness.
- Burden of preserving Islamic family tradition lies on Muslim women.
- Accuses media and anti-Islamic forces of showing Muslims in a negative manner.
- According to the organization the current debate on 'triple talaq' and objections raised on Muslim personal

laws are a consequence of the "rot" and religious ignorance in Muslim society.

#### 'Managers of family'

- Terming Muslim women "supervisors" and "managers" of the family.
- Un-Islamic customs and traditions prevalent in society today are due only to the women unaware of her din (faith).
- The JIH also says that those Muslim women who approached the Supreme Court against 'triple talaq' and polygyny are "irresponsible and ignorant of Islamic teachings" for thinking they are "oppressive to women."
- It also justifies polygyny among Muslims claiming it is "compatible with human nature."
- While declaring that is a "great sin" for a man to pronounce three talaqs in one go, the booklet says it is not desirable if a man makes "haste in bringing his matrimonial life to an end."
- Even as it claims that both men and women have rights to divorce under Islamic Law, the booklet discourages Muslim women from divorcing their husbands.
- However, it acknowledges that women are being deprived of their rightful share of inheritance under Quranic laws.
- It argues against taking disputes to court, saying that "when the cases are made public, anti-Islam forces get a chance to point fingers at Islam."

## **HEALTH ISSUES**

#### 1. Fortified foods to tackle malnutrition

#### What's in news?

- Malnutrition isn't just about acute starvation.
- Healthy-looking people are malnourished too, because their diet does not include the right micronutrients. Such deficiencies can have serious effects. For instance, iron deficiency leads to critical problems during pregnancy, and not enough Vitamin A can lead to poor vision, infections, and skin problems.

#### How to tackle this?

- In the year 2016, the Food Safety and Standards Authority of India (FSSAI) released a set of standards.
- Now, a number of enterprises will begin adding premixes of micronutrients to launch fortified foods.
- Milk cooperatives in Haryana, Punjab, Rajasthan, Assam and Maharashtra will fortify their products too.
- Targeting children, the Rajasthan, Madhya Pradesh, Haryana and Himachal Pradesh governments have begun using fortified oil for their mid-day meal schemes. West Bengal and Andaman and Nicobar Islands are now distributing fortified wheat flour through the public distribution system, and the Maharashtra government has started a pilot project.
- The FSSAI is also working with small local suppliers, for instance local flour grinding mills, to get them to add premixed micronutrients.

#### Way forwards:

• Consumer should be made aware of such fortified foods.

#### **Basic Information**

- Food Safety and Standards Authority of India (FSSAI):
- Food Safety and Standards Authority of India (FSSAI) is an autonomous body established under the Ministry of Health & Family Welfare, Government of India.
- The FSSAI has been established under the Food Safety and Standards Act, 2006 which is a consolidating statute related to food safety and regulation in India.
- FSSAI is responsible for protecting and promoting public health through the regulation and supervision of food safety.

#### 2. Focus on cold chain for safety of vaccines

#### Context:

• Union government has set the target for achieving 90% vaccination by 2021.

• The focus of the universal immunisation programme has shifted to strengthening of the cold chain to ensure the safety of vaccines.

#### Cold Chain and Immunisation:

- A cold chain is essentially a temperature-controlled supply chain with a series of continuous storage, transportation and distribution.
- Experts said that a well-managed supply chain has emerged as the most fundamental step for immunisation.
- Health care experts and medical professionals have emphasised on addressing managerial and operational challenges in the supply chain management of vaccines at a workshop organised.
- Experts also highlighted the significance of routine immunisation in the public health delivery system and nutrition among women and children.
- It was pointed out that the universal immunisation programme was catering to 2.60 crore infants and 3 crore pregnant women in the country, while saving 25 lakh lives every year.
- Since an effective intervention was needed to deliver life-saving vaccines in time to the targeted beneficiaries, the cold chain management covered the aspects of vaccine handling, stock control, minimising vaccine wastages, handling emergency situations, storage and distribution.
- Over 25% of vaccines go to waste globally, mainly because they lose their potency before the vials are opened, while India records about 5.50 lakh child deaths annually due to vaccine-preventable diseases.

#### 3. Plateful of pain

#### Context:

- Our health, 25 years from now, would be the sum total of the daily impacts of a degrading environment on our bodies.
- Triggers such as air pollution, toxins in water and food and climate change would work synergically.
- Different permutations and combinations of communicable and non-communicable diseases would weaken our bodies.

#### Disease burden due to Climate Change:

- Climate change would possibly be the biggest cause for diseases 25 years from now.
- A warmer world would help vectors proliferate and expand their territories.

- Deadly new diseases would emerge from dried-up forests, piggybacking on animals that would have nothing to sustain them there.
- We have no idea what these new zoonotic diseases would be and have no drugs to treat them.
- Our inability to deal with the Zika epidemic is a rude reminder of our helplessness.
- Even known enemies like cholera would spread to newer areas in a warmer world and extreme weather events such as sudden rain.
- Heat strokes would become more common.

#### Climate change and malnutrition:

- Climate change and extreme weather events would destroy crops, and persistent droughts would dry up forestlands, which would have been otherwise an alternative source for food-stuff.
- This would perpetuate food scarcity.
- As a result, some parts of the world would have to deal with chronic malnutrition.

#### Future Food:

- The food we would be left with would be the next big determinant of our health in the future.
- It would be full of obesogenic toxins and cancercausing agrochemicals.
- Genetically modified (GM) foods that are linked with allergies would become more common in our markets, despite the fact by that time, more data on GM food's detrimental effects would have accumulated.
- Food rich in fat, salt and sugar rich foods would lead to obesity and increase the risk of diabetes and heart ailments.

#### Lifestyle diseases:

- There are problems such as Internet addiction, which are bound to increase with time.
- More aging populations would result in a large number of people suffering from dementia, Alzheimer's and Parkinson's diseases.
- Psychological problems, including depression, too would be high.
- Light pollution would disturb our sleep and, in turn, result in many chronic diseases.

#### Post-antibiotic era:

- The proportion of communicable diseases might go down, the fact that we would be in the post-antibiotic era, when pathogens would have stopped responding, is a cause for concern.
- Treating simple infections would be difficult.
- This could mean that India and other parts of the world too would fail to eliminate diseases such as kalaazar,

filariasis, leprosy, measles and tuberculosis and miss national deadlines set by governments.

#### Implications:

- The increase in diseases has wide-ranging public health implications.
- We are already witnessing a trend towards the privatisation of public healthcare, and private healthcare is not likely to be bothered about the poor, who would have the least capacities to adapt in a changing world.
- Moreover, it seems we will be unable to meet the Sustainable Development Goal 3, which says that by 2030, countries would have to find ways to ensure healthy lives and promote well-being for all of all ages.
- Goal 2, which promises to end hunger, achieve food security and improve nutrition, seems unattainable.
- Only the affluent might have the luxury of benefitting from medical breakthroughs.
- There would be artificial hearts, kidneys and lungs to deal with organs damage.

#### Artificial organs in future world:

- Road accident victims who lose limbs would have the option of bio-prosthetics, which outperform the natural body parts.
- Artificial uterus would take care of infertility issues.
- Even artificial eyes would be available.
- Diagnostic tests would be performed on sweat, instead of blood, and wearable sensors would monitor us day and night.
- · Surgeries would be less invasive.
- Personalised medicines would make life better for the sick.
- We would even find ways to deal with the pesky little.

#### 4. <u>Rajasthan to launch action plans for reducing infant</u> <u>mortality</u>

#### What's in news?

- The Rajasthan government has decided to launch district-level action plans for utilising locally available resources to reduce infant mortality rate (IMR).
- The action plans will be based on the socio-economic conditions prevailing in each district.
- Importance of district-level action plans better coordination among the doctors working in the primary health centres for optimum utilisation of resources.
- The IMR in Rajasthan was 32 for every 1,000 live births,according to Sample Registration System Baseline Survey-2014.
- Action plans would aim at reducing IMR to 12 per 1,000 live births by 2030 by improving the intensive care units, referral services and availability of the medical

### 5. <u>After coronary stents, cap on prices of other devices</u> <u>likely</u>

#### What's in news?

- Union Health Minister J.P. Nadda said the government was considering capping prices of other medical devices.
- In February, the National Pharmaceutical Pricing Authority (NPPA) had capped the price of bare-metal stents at Rs.7,260 and drug-eluting stents at Rs. 29,600, after declaring coronary stents as "essential medicines."

#### Why such a move?

- To ensure medicines and medical devices remain affordable.
- The National Pharmaceutical Pricing Authority (NPPA):
- The National Pharmaceutical Pricing Authority (NPPA) is a government regulatory agency {set up as per executive order and thus not a statutory body} that controls the prices of pharmaceutical drugs in India.
- The NPPA was formed on 29 August 1997. It has been given powers to implement and enforce the Drugs Price Control Order (DPCO), 1995/2013.
- It can fund studies regarding pricing of drugs.
- It also has the task to monitor drug shortages and take appropriate actions to rectify it.
- It also has to collect and maintain data regarding the import and export of drugs, market shares of pharmaceutical companies and their profits.
- It also handles legal disputes that arise out of policies created by it.
- It advices the Government of India in matters of drug policies and pricing.
- It renders advice to the Central Government on changes/ revisions in the drug policy.
- It can also cap the prices of a drug and recently it capped the prices of coronary stent.
- vectors by using fungi and bacteria.

#### 6. Prices of 31 more drugs capped

#### Context:

Accessibility and affordability of medicines.

#### What's in news?

- The National Pharmaceutical Pricing Authority (NPPA) capped the prices of 31 more drugs.
- **Price control:** intrauterine devices used for birth control; Factor VIII, a life-saving medicine for haemophilic patients; morphine, a pain killer; and rifampcin, a powerful antibiotic used to treat infections such as tuberculosis and leprosy.

#### **Basic Information:**

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- It can also cap the prices of a drug and recently it capped the prices of coronary stent.

#### 7. Multidrug-resistant TB will rise in India, says new study

#### Context:

- Health Ministry set itself an ambitious target of eliminating tuberculosis (TB) by 2025
- A new study in the medical journal Lancet says that India's TB crisis is likely to get worse.

#### Report:

- Multidrug Resistant-Tuberculosis (MDR-TB), a version of the disease where patients do not respond to first-line drugs, will become more common than it is now.
- The report projects that, by 2040, the percentage of MDR-TB will make up 32.5% of all TB cases in Russia, 12.4% of the TB cases in India, 8.9% of the TB cases in the Philippines, and 5.7% of all TB cases in South Africa.

#### Hotspot of MDR-TB

- India is home to the most serious 'hotspots' of MDR-TB transmission, especially overcrowded cities such as Mumbai.
- Not only does India shoulder the highest TB burden in the world, with over 2 million of the 10 million reported cases, it also accounts for the most drug-resistant patients — nearly 1.3 lakh people who do not respond to first-line drugs.
- It is estimated that each year there are 10.4 million new cases of TB, leading to 1.8 million deaths globally.
- Nearly 40% of all drug-resistant cases occur in Russia, India, the Philippines, and South Africa – accounting

for more than 230,000 cases of drug-resistant disease in 2015.

#### Key Fact:

- Two new TB drugs, Bedaquiline and Delamanid are to be made available in India's national healthcare system.
- The drug is available only in six sites across the country, and according to the Health Ministry's TB report, only 207 of the 79,000 patients who need the drug have access to it.

#### 8. Govt. regulator gives nod for GM mustard

#### What's in News:

- The Genetic Engineering Appraisal Committee (GEAC), India's apex regulator for genetically modified seeds.
- GEAC cleared GM mustard for environmental release and use in farmer fields.
- Approval is dependent on a final nod from Environment Ministry.

#### Dhara Mustard Hybrid (DMH - 11):

- · The transgenic mustard.
- Developed by a team of scientists at Delhi University led by former vice chancellor Deepak Pental under a government-funded project.
- It uses a system of genes from soil bacterium that makes mustard - generally a self pollinating plant - better suited to hybridisation than current methods.

#### Key Fact:

- GM mustard would be the first transgenic food crop to be allowed for commercial cultivation in Indian fields and would be a gateway for several geneticallymodified food crops in India.
- GM seeds are the need of the hour, since they are able to address threats from climate change.

#### BT brinjal blocked:

 Bt Brinjal was cleared by the Committee in 2010 but was blocked by then Environment Minister, Jairam Ramesh, who cited, among other things, a paucity of safety tests.

#### <u>What is Genetic Engineering Appraisal Committee</u> (GEAC)?

- It is established under Ministry of Environment, Forests and Climate Change.
- It is the apex body for approval of activities involving large scale use of hazardous microorganisms and recom-binants.
- It is also responsible for ap¬proval of proposals relating to release of genetically engineered organisms and products including experimental field trials.

#### 9. Pneumonia vaccine to be part of immunisation drive

#### What's in News:

- India rolled out the long-awaited anti-pneumonia vaccine- pneumococcal conjugate vaccine (PCV) as part of the government's Universal Immunisation Programme (UIP).
- The vaccine will give protection against 13 types of pneumococcal bacteria which cause pneumonia disease and meningitis.
- The vaccine programme aims to protect nearly 270 lakh newborns against 12 preventable diseases every year.
- Pneumococcal disease is the leading cause of vaccinepreventable deaths in children under five years of age globally and in India.
- India accounts for nearly 20% of global pneumonia deaths in this age group.
- Key Fact: India shoulders the highest burden of child pneumonia and diarrhoea deaths with Nigeria, Pakistan, Democratic Republic of Congo and Angola taking up the next four spots.

#### 10. Survival of newborns: India ranks lower than Somalia

#### Study: Global Burden of Disease (GBD)

#### Highlights:

- Newborns in India have a lesser chance of survival than babies born in Afghanistan and Somalia.
- India ranks 154 out of 195 countries in the GBD ranking for health access and quality (HAQ). Last year, India was ranked 143 among 188 countries.
- The HAQ Index is based on death rates from 32 ailments that could be avoided by timely medical intervention.
- India's healthcare index of 44.8 is the lowest among the sub-continental countries, as Sri Lanka (72.8), Bangladesh (51.7), Bhutan (52.7), and Nepal (50.8) all fared better.
- The top-ranked nation was Andorra with an overall score of 95 and the lowest-ranked nation was Central African Republic at 29.

#### Areas need to be focused on:

- India has failed to achieve health care targets, especially those concerning neonatal disorders, maternal health, tuberculosis, and rheumatic heart disease.
- 11. <u>Rajasthan: 600 more health centres to be converted</u> into model units

#### <u>In news:</u>

• Six hundred more Primary Health Centres (PHCs) in Rajasthan will shortly be converted into model units

#### Model units:

 Doctors and para-medical staff at the PHCs will take special care to maintain health and nutritional status of women, children and old age patients.

- Additional services provided: allopathy and Ayurveda physicians available to patients.
- They are functioning as "wellness centres" with a significant increase in patient registration and institutional deliveries.
- Model PHCs would provide free medicines and conduct as many as 15 diagnostic tests free of cost.

## 12. NGO evolves blueprint to end female genital mutilation

#### In News:

- Practice of female genital mutilation (FGM) report compiled by Speak Out on FGM,a group of Dawoodi Bohra woman (victims of FGM) along with a human rights NGO, Lawyers Collective.
- Report speaks about psychological trauma and physical scars faced by the victims, and the legal aspects that could be weaved in to stop the practice completely.
- Practice: Khatna, as practised among Dawoodi Bohras, involves cutting the part of the clitoral hood or the prepuce, of girls as young as seven years.
- While a large number of countries have banned the practice, India does not have a law on the same.

## 13. Ready-to-serve meal packets to tackle malnutrition

#### In News:

- Union Minister for Women and Child Development Maneka Sanjay Gandhi made a pitch for the introduction of packets of fortified, ready-to-serve meals to tackle malnutrition.
- 'Feed the Future Now': a campaign by the NGO Akshaya Patra Foundation that aims to serve five billion meals to children across India by 2020 was flagged off by the Minister.

#### **Basic information:**

- Food fortification or enrichment is the process of adding micronutrients (essential trace elements and vitamins) to food. It may be a purely commercial choice to provide extra nutrients in a food
- As outlined by the FAO, the most common fortified foods are:
  - \* Cereals and cereal based products
  - \* Milk and Milk products
  - \* Fats and oils
  - \* Accessory food items
  - \* Tea and other beverages
  - \* Infant formulas

#### 14. Centre confirms 3 Zika cases in Gujarat

#### In News:

• The Union Health Ministry has confirmed that three cases of Zika were reported from Ahmedabad.

#### Transmission:

- Zika virus is primarily transmitted to people through the bite of an infected mosquito from the Aedes genus, mainly Aedes aegypti in tropical regions.
- Aedes mosquitoes usually bite during the day, peaking during early morning and late afternoon/evening.
- This is the same mosquito that transmits dengue, chikungunya and yellow fever.
- Sexual transmission of Zika virus is also possible.
- Other modes of transmission such as blood transfusion are being investigated.

#### 15. The secret of long life in Japan

## Context:

- The World Health Organization report: Japan's average life expectancy at birth is 83.7 years (Men : 80.5 years, Women: 86.8 years).
- The global average male life expectancy is 69.1 years, 73.8 years for women and 71.4 for both sexes combined.

#### Reasons:

- <u>Diet:</u>
- Rice, vegetables, fish and meat are staples of the Japanese diet.
- Japanese consume more fish than the norm in most other nations.
- Pickled, fermented and smoked foods are also common.
- Fermented foods, in particular, support a healthy digestive system. Soybeans in the form are another key part of any meal.
- Overall, Japanese cuisine is low in calories and saturated fats, a significant factor in reducing the risk of cardiovascular disease.

#### Public Policy:

- 1950's and 1960's policy: Childhood vaccination programmes, the introduction of universal health insurance, campaigns to reduce salt consumption, free treatment for TB and the widespread use of medication to reduce blood pressure.
- Regular medical check-ups.

#### Cultural and Social factors:

 Social cohesion: strong group orientation in Japan prevents the elderly and the economically less well-off from feeling the kind of social alienation linked to bad health.

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- Sense of rootedness and community belonging that develops positive emotions, vital to well-being.
- Active lifestyle of many elderly Japanese: Retirees often continue working by choice in a voluntary or part-time capacity.
- Senior citizens directing traffic at parking lots, guiding schoolchildren to cross roads safely, or taking tourists around sightseeing spots are all common sights.

#### **Genetic factors:**

• Two genes - DNA 5178 and ND2-237Met genotype, help Japanese live longer, by protecting them against certain adult onset diseases.

#### Consequences:

- Japan's is one of the world's most rapidly ageing societies. Over a quarter of the population is already 65 or older.
- Two decades of economic stagnation and a shrinking working age population are threatening the financial and social underpinnings of universal healthcare.
- Prolonging "healthy life expectancy" and figuring out how to pay the bill for it are both tough challenges.

#### 16. Odisha extends free cancer treatment to all districts

#### <u>In news:</u>

- The Odisha government extended free treatment for cancer patients in the whole State.
- Under the programme, all cancer patients can avail chemotherapy and consultations from oncologists free of cost at all district headquarters hospitals.
- Key fact: In the first phase of the free cancer treatment programme, about 5,000 patients have been benefited.

#### 17. <u>Scientists find what causes spread of cancer & new</u> way to stop it

#### <u>In news:</u>

• An international team led by scientists from Johns Hopkins University has, for the first time, found what causes the spread of cancer and what could slow it down.

#### Important findings:

- 90% of cancer deaths are caused when cancer cells break off from the origin and start spreading elsewhere in the body.
- There are no existing drugs for stopping this spread, known as metastasis, of cancer.
- No commercial drugs are now being produced specifically to inhibit metastasis because drug companies believe the best way to stop cancer from spreading is to destroy the primary tumor from which it originates.

#### Findings:

- When cancer cells get densely packed they secrete two proteins that deliver a stark message to other cells: go away. This causes the cancer cells to break off from the pack and float through the blood stream or lymphatic system to other sites and start growing afresh.
- The team found that two existing drugs Tocilizumab and Reparaxin — prevented cancer cells from getting their marching orders.
- Tocilizumab is an approved medication for rheumatoid arthritis and is in trials for use in ovarian cancer cases. Reparaxin is being evaluated as a possible treatment for breast cancer.

# **INTERNATIONAL RELATIONS**

## **India and Turkey**

## Erdogan calls for war on terror

#### What's in news?

- Delegation-level talks between India and Turkey
- Visiting President Recep Tayyip Erdogan condemned the attack on CRPF personnel in Sukma and expressed solidarity with India.
- Turkey and India called for a collective fight against terrorism.
- During the discussion about cross border terrorism, Prime Minister Narendra Modi, urged for a common strategy against states that use terrorism as an instrument of power.
- Turkey reiterated its support to India's UNSC bid.
- President Erdogan in a TV interview before arriving in India had called for end to the violence in Kashmir and starting a multilateral dialogue involving India and Pakistan. However India maintained that it had never shied away from holding bilateral talks in line with the 1972 Shimla Pact and the 1999 Lahore agreement and said the main issue in Kashmir is of terrorism.

## India - Australia

#### Modi expresses concern at Australia visa policy

#### What's in news?

- Australia's newly introduced visa restrictions (scrapping of "457" visa policy) are likely to impact India.
- The issue of the visas came up when Australian Prime Minister Malcolm Turnbull called up Prime Minister Narendra Modi.

#### Changes made in 457 policy:

- The tenure of the visas was to be reduced from four to two years.
- Increase in visa fees.

## India-UK

#### India, U.K. to cooperate on deportation

## What's in news?

• India and the United Kingdom will cooperate with each other to ensure the smooth return of Indians overstaying in U.K.

- Deportation agreement was made at the first Home Affairs dialogue between the two countries.
- Agreed to formalise arrangements for cooperation on anti-terror operations and cyber offences.

#### Discussions held:

- Issues of mutual cooperation in investigations, including those against "Khalistani activists".
- Requests for extradition and deportation.

## India-U.S

## U.S. keen to expand Malabar exercise to include Australia

#### What's in news?

- The U.S. is keen on expanding Malabar trilateral exercises but it will be a decision based on discussion and consensus with the partner countries, said a senior U.S. Navy officer.
- The first step is an observer status and then potentially as participants.

## Next Edition:

• The next edition of Malabar is scheduled to be held in July this year in the areas "surrounding India in Bay of Bengal" for which the planning conferences are under way.

#### Australia's willingness to join:

- Australia has requested India for observer status at this year's Malabar exercises and is awaiting a final decision.
- But India has been reluctant to let expand the exercises further from the trilateral format which included Japan due to sensitivities from China.
- Japan and the U.S. are keen on expanding the games to include Australia which was expressed by officials from both countries on various occasions.

#### Focus:

• This year's exercises are expected to focus on Anti-Submarine Warfare (ASW) with increasing Chinese submarine presence in the Indian Ocean.

#### **Basic Information:**

- Malabar exercise began in 1992 as a bilateral naval exercise between India and the U.S. has since grown in scope and complexity acquiring considerable heft in recent times.
- In 2015, it was expanded into a trilateral format with the inclusion of Japan.

## India-China

## 1. China offers to rename OBOR to allay India's fears

## Context:

• Chinese One Belt One Road and India's apprehensions. India has refused to confirm or regret its attendance at China's Belt and Road Forum to be held in Beijing on May 14-15.

## What's in news?

- China is planning to consider renaming the China-Pakistan Economic Corridor (CPEC) if it would end India's reservations over its One Belt One Road (Or Belt and Road Initiative) passing through Pakistan-occupied Kashmir (PoK).
- China insists that the OBOR has no connection to sovereignty disputes.

#### **4-point solution:**

- Chinese 4-point solution to "manage differences" between India and China, including –
  - \* New treaty on cooperation.
  - \* Restarting talks on a free trade agreement (FTA).
  - \* An early resolution to the border issue .
  - \* Aligning the B&R with India's "Act East policy."

#### Territorial dispute.

- China has no intention to get involved in the sovereignty and territorial disputes between India and Pakistan
- The CPEC is for promoting economic cooperation and connectivity. It has no connections to or impact on sovereignty issues.

#### Key point:

• According to the Chinese government more than 100 countries will participate, and all SAARC countries minus India have already signed on to the 60-nation infrastructure initiative first proposed in 2013.

## 2. <u>Despite CPEC, our stand on Kashmir unchanged, says</u> <u>China</u>

#### What's in news?

- China reiterated that its position on the Kashmir issue remained unchanged despite its "promotion" of the China Pakistan Economic Corridor (CPEC) as an economic undertaking.
- China's Ambassador Luo Zhaohui rebutted the assumption that the CPEC infringed India's sovereignty, as it passed through the Pakistan occupied Kashmir (PoK). "The CPEC is for promoting economic cooperation and connectivity. It has no connections to or impact on sovereignty issues," he said.

## 3. India to skip B&R Forum

Context: Belt and Road Initiative (B&RI) Forum

#### What's in news?

• India will be absent from China's Belt and Road Initiative (B&RI) Forum beginning Sunday.

## Indian Government response:

- Government supported connectivity projects.
- They "must be pursued in a manner that respects sovereignty and territorial integrity".
- India from the beginning has objected to the \$46-billion China-Pakistan Economic Corridor part of the B&RI, as it includes projects in Pakistan-occupied Kashmir (PoK).
- China will unveils plans for infrastructure projects estimated at \$500 billion across Asia and Europe.

#### 4. India welcome to join BRI: China

#### What's in news?

- China said it's "doors will always remain open" for India's participation in the Belt and Road Initiative (BRI).
- New Delhi decided not to participate in a two-day brainstorming forum held in Beijing to advance the transnational connectivity project.

## 5. China invokes Panchsheel

#### What's in news?

- China re-invoked the doctrine of Panchsheel or the five principles of peaceful co-existence — as the template for addressing India's concerns over the China Pakistan Economic Corridor (CPEC) and the Belt and Road Initiative.
- The five principles of peaceful cooperation along the Belt and Road should be the basis for addressing India's concerns.

#### **Basic Information:**

#### Panchsheel Doctrine:

- Mutual respect for each other's territorial integrity and sovereignty
- Mutual non-aggression
- Mutual non-interference in each other's internal affairs
- · Equality and mutual benefit and
- Peaceful co-existence, as the touchstones for international conduct.

#### 6. No room yet for India in NSG, says China

#### What's in news?

- China to oppose India's unilateral entry into the Nuclear Suppliers Group (NSG).
- Nuclear weapon states that have not signed the Nuclear Non-proliferation Treaty (NPT) are barred from entering NSG.

- Bern, Switzerland- plenary session of NSG will be held next month.
- India has underscored that NPT membership is not essential for joining the NSG, as was illustrated in the case with France, which became a member of the NSG without signing the NPT.
- 7. <u>China warns India over Dhola-Sadiya bridge in</u> <u>Arunachal Pradesh</u>

#### Context:

• Days after Prime Narendra Modi launched the country's longest bridge linking Assam with Arunachal Pradesh.

#### What's in news?

• China asked India to be "cautious" and exercise "restraint" over building infrastructure in Arunachal Pradesh.

#### Key Fact:

- China and India fought a brief war in 1962 when the Chinese entered Arunachal Pradesh and unilaterally declared a ceasefire after withdrawing to the McMahon Line.
- China has long been building infrastructure along the borderunlike India, which, experts say, avoided building roads in the region, fearing a repeat of the 1962 war when the People's Liberation Army troops entered Assam.

## India-Palestine

1. 'India can play great role in peace efforts'

#### What's in news?

- Palestinian President Mahmoud Abbas to arrive in India.
- · The visit aimed at strengthening old ties.
- Palestinian wants India to play important role in the Israel-Palestine peace process.

#### 2. Palestine, Israel must coexist: Modi.

#### Context:

• Palestinian President Mahmoud Abbas visit to India.

#### What's in news?

- India urged that a future state of Palestine should coexist peacefully with Israel.
- Palestinian President Mahmoud Abbas said that a sovereign state of Palestine should be built according to the pre-1967 borders and include East Jerusalem as the capital.
- Competing Israeli and Palestinian claims over East Jerusalem, which is home to Jewish and Muslim holy sites, remain a major hurdle in the peace process.

- <u>Dialogue the way:</u> The challenges in West Asia can be dealt with, sustained by political dialogue and peaceful means. India hopes for an early resumption of talks between the Palestinian and the Israeli sides, for finding a comprehensive resolution
- The delegations also signed agreements on visa exemption on diplomatic and official passports, sports and youth affairs, agriculture, health and IT.

## India-Netherland

### <u>Netherlands backs India's bid for permanent seat in UN</u> security council

#### What's in news?

 The Netherlands came out in support of India's bid for a permanent seat in the United Nations Security Council (UNSC), saying the country is a "prime candidate" if the premier global body were to expand.

#### UN reforms and new innovative ideas:

 India and other G4 nations including Brazil, Germany and Japan recently said they were open to innovative ideas and willing to not exercise veto as permanent members of a reformed Security Council until a decision on it has been taken.

#### G4 nations:

- The G4 nations comprising Brazil, Germany, India, and Japan are four countries which support each other's bids for permanent seats on the United Nations Security Council.
- Unlike the G7, where the common denominator is the economy and long-term political motives, the G4's primary aim is the permanent member seats on the Security Council.
- Each of these four countries have figured among the elected non-permanent members of the council since the UN's establishment.

## India-Pakistan

#### 1. Recourse to ICJ 'carefully considered'

#### Context:

- India got a stay on Pakistan's death sentence to arrested former Navy official Kulbhushan Jadhav at an international tribunal.
- The government defended going to the tribunal, as a "carefully considered decision."
- The Ministry of External Affairs said the decision to resort to arbitration at the International Court of Justice, after a **gap of 46 years**, was appropriate as the ultimate aim is to save Mr. Jadhav's life.

#### India and ICJ:

• India has in the past refused to accept the jurisdiction of the ICJ on issues such as the Atlantique aircraft incident of 1999 and in the Saurav Kalia case.

#### Atlantique aircraft incident

- The Atlantique Incident was an event in which a Breguet Atlantic patrol plane of the Pakistan Navy's Naval Air Arm, with 16 people on board, was shot down by the Indian Air Force for violating Indian airspace. The episode took place in the Rann of Kutch on 10 August 1999, just a month after the Kargil War.
- Pakistan later lodged a compensation claim at the International Court of Justice, blaming India for the incident, but the court dismissed the case, ruling that the Court had no jurisdiction in the matter
- Saurav Kalia case: Captain Saurabh Kalia was an officer of the Indian Army who was killed during the Kargil War while being held as a prisoner of war by the Pakistani security forces. He along with five other soldiers of his patrolling team was captured alive and kept in captivity where they were tortured, then killed.

#### The International Court of Justice :

- The International Court of Justice (French: Cour internationale de justice; commonly referred to as the World Court, ICJ or The Hague) is the primary judicial branch of the United Nations (UN).
- Seated in the Peace Palace in The Hague, Netherlands, the court settles legal disputes submitted to it by states and provides advisory opinions on legal questions submitted to it by duly authorized international branches, agencies, and the UN General Assembly.
- Jurisdiction: As stated in Article 93 of the UN Charter, all 193 UN members are automatically parties to the Court's statute. Non-UN members may also become parties to the Court's statute under the Article 93(2) procedure. Once a state is a party to the Court's statute, it is entitled to participate in cases before the Court. However, being a party to the statute does not automatically give the Court jurisdiction over disputes involving those parties.

#### 2. India-Pakistan ties may slide further: U.S. intelligence

#### What's in News?

## U.S. intelligence assessment of the security situation in the Indo-Pak.

- The relations between India and Pakistan is likely to deteriorate further in 2017
- The easing of tension will depend on a sharp and sustained reduction of cross-border attacks by terrorist groups based in Pakistan and progress in the Pathankot investigation.
- Two major terrorist attacks in 2016 by militants crossing into India from Pakistan led to the slide in ties, and the "perceived lack of progress in Pakistan's investigations"

into the January 2016 Pathankot cross-border attack" compounded it.

- Increasing numbers of fire-fights along the Line of Control, including the use of artillery and mortars, might exacerbate the risk of unintended escalation between these nuclear-armed neighbours
- India's military doctrine of cold start that aims to launch low intensity operation into Pakistan, and Pakistan's declared willingness to respond with tactical nuclear weapons have been under scrutiny of American security strategists for a while.
- Pakistan-based terrorist groups will present a sustained threat to U.S. interests in the region and continue to plan and conduct attacks in India and Afghanistan.
- The United States continues to aggressively target extremists in Pakistan and the surrounding region, including charities and other front groups used as vehicles to facilitate illicit terrorist activities.

## **Basic Information:**

 Cold Start is a military doctrine developed by the Indian Armed Forces for use in a possible war with Pakistan. It involves the various branches of India's military conducting offensive operations as part of unified battle groups. The Cold Start doctrine is intended to allow India's conventional forces to perform holding attacks in order to prevent a nuclear retaliation from Pakistan in case of a conflict.

#### 3. Surprised by ICJ order, Pak. mulls next move

#### Context:

 India moved an application in the International Court of Justice against the hanging of Kulbhushan Jadhav, who has been convicted of espionage in Pakistan.

#### In News:

#### Pakistan's line of defense:

- 2008 agreement on consular access: Clause VI of the agreement says a 'decision to grant consular access in cases where detentions and arrests relate to political or security matters" will be taken "on the merits of the case".
- In the 1999 Atlantique incident, when a Pakistan Navy plane was shot down by India in the disputed Rann of Kutch area, the ICJ ruled in favour of India, saying it had no jurisdiction in the existence of bilateral agreements.
- <u>Appeals still pending</u>: Three forums of appeals left. One is the review in FGCM (Field General Court Martial), the second is the Supreme Court and the final is the mercy petition. So ICJ's intervention is ruled out.
- 4. <u>Pakistan should not execute Kulbhushan Jadhav till</u> <u>final verdict, rules ICJ</u>

#### Context:

• The International Court of Justice (ICJ)

#### May-2017

stayed the execution of former Indian naval officer Kulbhushan Jadhav, who was sentenced to death by a Pakistan military court on the charge of spying, till its final decision.

#### In News:

Argument accepted: Court accepted India's argument

 <u>Argument</u>: Pakistan failed to provide required consular notification and access fell under the scope of Article 1 of the Optional Protocol of the Vienna Convention of Human Rights.

#### ICJ verdict:

- 2008 bilateral agreement on consular relations did not impact ICJ's jurisdiction
- Ordered Pakistan to take all measures at its disposal to prevent the execution of Mr. Jadhav, pending its final judgment.
- The decision was adopted unanimously.

#### **Implication of Order:**

- Pakistan to stay Mr. Jadhav's execution.
- Inform the court measures it is taking to implement the order.
- Order does not cover issues such as consular access to Mr. Jadhav.

## 5. India, Pakistan set to enter SCO amid differences over terrorism

#### In News:

- India and Pakistan will formally join the Shanghai Cooperation Organisation (SCO) at a formal ceremony in Beijing on June 15.
- The entry of the two South Asian countries will make the SCO the world's largest regional cooperative organization representing the biggest section of global population

#### Aim of SCO:

- boost trade and military relationship between countries in China's neighborhood.
- Decision to allow India to join SCO came after India boycotted China's much-touted Belt and Road Forum.

#### **Challenges ahead:**

- Whether SCO will provide China and Russia an opportunity to mediate in the differences between India and Pakistan.
- But India refuses to permit external influence in its bilateral dealings with Islamabad.
- The SCO should promote security cooperation to combat the "three forces" of terrorism, separatism, and extremism in a more precise and efficient manner, so as to safeguard the sovereignty and homeland security of all members and maintain the regional peace and

stability.

 China is willing to work with Russia and other member countries to promote the SCO solidarity and make cooperations among SCO members more efficient and more effective.

## India-Iran

#### 1. Iran sets new terms for gas field award

#### <u>In news:</u>

- Iran wants India to pay more than triple the gas price for award of the coveted Farzad-B natural gas block to ONGC Videsh (OVL).
- Iran wants India to buy all of the natural gas to be produced from the Persian Gulf block at a price equivalent to the rate Qatar charges for selling liquefied natural gas (LNG) to India under a long-term deal.
- Farzad-B was discovered by OVL in the Farsi block about 10 years ago.
- Iran was initially unhappy with the \$10 billion plan submitted by OVL for development of the 12.5 trillion cubic feet reserves in Farzad-B field and an accompanying plant to liquefy the gas for transportation in ships.

#### 2. <u>Farzan B gas field row: Iran threatens to replace India's</u> <u>OVL with Russian firms</u>

#### <u>In news:</u>

- Iran has threatened to rope in Russian oil companies for developing the Farzad B gas field, replacing the consortium of Indian state-run entities (ONGC Videsh Ltd) that discovered it.
- The threat comes in retaliation to New Delhi's move to cut purchase of Iranian oil over Tehran's delay in awarding the block.
- Reports from Vienna quoted Iran's oil minister Bijan Zanganeh as saying that he expected Russian firms to enter the field if the Indian consortium failed to come up with a satisfactory offer.

## India-Israel

#### After Palestine, it's Israel's turn

#### In news:

- Prime Minister Narendra Modi's to visit Israel in July
- · First ever visit by an Indian Prime Minister to Israel
- Planning for a diaspora event: The diaspora event is important to give all the Indians now in Israel a sense of identity and community.

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#### Key Fact:

- Israel is home to 80,000 people of Indian origin, mainly those who have taken "Aliyah," as the migration of the Jewish diaspora to Israel is called.
- Among the groups which migrated in large numbers are the Bene-Israelis from Maharashtra, Cochin Jews, Baghdadi Jews from Kolkata, as well as some from the so-called "lost tribe" of B'nai-Menache from Manipur.

## India-Africa

### Bid to boost India, Africa trade ties

#### Key Points:

- Finance Minister Arun Jaitley will discuss potential areas of boosting cooperation between India and Africa here on Monday.
- Mr. Jaitley will open the India-Africa Cooperation session being held in conjunction with the annual meeting of the African Development Bank (AfDB).
- The sessions will cover areas such as trade and investment, agriculture, renewable energy and manufacturing among others.
- Total trade between India and Africa increased almost fivefold between 2005-06 and 2015-16, and stood at \$52 billion in March 2016-17.
- This is the first time that the African Development Bank is holding its annual meeting outside of the African continent.

## India-Russia

#### Modi gears up to meet Putin

- Prime Minister Narendra Modi is all set to hold the 18th annual summit with Russian President Vladimir Putin in St Petersburg during his fournation tour, starting Monday.
- The tour will take him to Germany , Spain and France as well. This Europe-centric visit is aimed at attracting greater investment to India.
- India and Russia: bilateral trade is going down and Russia increasingly aligning itself with China.

#### **Basic Information:**

- North–South Transport Corridor
- The International North–South Transport Corridor (INSTC) is a 7,200-km-long multi-mode network of ship, rail, and road route for moving freight between India, Russia, Iran, Europe and Central Asia.
- The route primarily involves moving freight from India, Iran, Azerbaijan and Russia via ship, rail and road.
- The objective of the corridor is to increase trade connectivity between major cities such as Mumbai,

Moscow, Tehran, Baku, Bandar Abbas, Astrakhan, Bandar Anzali, etc.

#### **TIR Convention**

- The Convention on International Transport of Goods Under Cover of TIR Carnets (TIR Convention) is a multilateral treaty that was concluded at Geneva on 14 November 1975 to simplify and harmonise the administrative formalities of international road transport. (TIR stands for "Transports Internationaux Routiers" or "International Road Transports
- The conventions were adopted under the auspices of the United Nations Economic Commission for Europe (UNECE).
- As of January 2017, there are 70 parties to the Convention, including 69 states and the European Union.
- The TIR Convention establishes an international customs transit system with maximum facility to move goods:
  - \* In sealed vehicles or containers;
  - \* From a customs office of departure in one country to a customs office of destination in another country;
  - \* Without requiring extensive and time-consuming border checks at intermediate borders;
  - \* While, at the same time, providing customs authorities with the required security and guarantees.
- The TIR system not only covers customs transit by road but a combination is possible with other modes of transport (e.g., rail, inland waterway, and even maritime transport), as long as at least one part of the total transport is made by road.

## India-Mauritius

#### India gives \$500 mn aid to Mauritius

#### In news:

- India announced a \$500 million line of credit to Mauritius.
- The two countries decided to firm up cooperation in the field of maritime security in the Indian Ocean region , trade and investment.

#### Maritime security agreement:

The two countries inked a maritime agreement

#### Focus area:

- Fight against piracy that impacts trade and tourism, trafficking of drugs and humans, illegal fishing, and other forms of illegal exploitation of marine resources.
- Strengthen wide-ranging cooperation in hydrography for a secure and peaceful maritime domain.

#### Other decisions taken:

- Extend the operational life of Coast Guard ship Guardian, that was given by India to Mauritius under a grant assistance programme.
- During Mr. Modi's visit to Mauritius in March 2015, Mr. Modi had commissioned offshore patrol vessel (OPV) Barracuda, built and financed by India, into the Mauritian Coast Guard.

## India-UAE

#### 1. eMigrate violates our sovereignty: UAE envoy

#### <u>In news:</u>

- The United Arab Emirates, one of the largest employers of Indians in the Gulf, has raised a red flag with the Ministry of External Affairs over the government's flagship eMigrate programme.
- It claims it to be a sovereignty issue.
- Other Gulf countries, including Saudi Arabia, had also raised issues with the eMigrate system as soon as it was launched.
- More than five million Indian nationals work in Gulf countries with a majority of them hired as bluecollar workers in labour intensive sectors including construction, industrial sector, transport, supply and service sectors.

#### What is eMigrate programme?

- MEA's Overseas Affairs department in 2015 set up a database initiative called the eMigrate programme
- It gathers extensive information on emigrants as well as foreign employers, their companies and recruiting agents.

#### **UAE's contention:**

- India wants to build a databank to extract information about these companies in the UAE. We consider this a breach of our sovereignty.
- eMigrate programme's mandate to inspect premises of UAE companies.
- World Bank study on emigrants and remittances worldwide 2017:
- India retained its top position as a recipient of remittances
- But it saw the biggest year-on-year decline of 8.9% in 2016.
- In 2014 India received \$69.6 billion in remittances, which dipped to \$68.9 billion in 2015 and fell to \$62.7 billion last year.
- Measures taken by government like eMigrate programme in 2015 and a system of Minimum Referral Wages (MRW) in 2014, have made Indian labour much

more difficult to hire by foreign employers.

#### India's loss has been its neighbours' gain:

- Countries like Bangladesh, Pakistan, etc. don't have any kind of restrictions, recruiters and contractors find it easier to hire employees.
- In 2015, of the three countries
- India accounted for 37% of the labour, Pakistan accounted for 44%, while Bangladesh accounted for just 19%.
- However, in the first three months of 2017, Bangladesh has reversed that trend and now accounts for 51% of the South Asian labour output to Gulf countries.

## 2. UAE ready for air traffic pact

#### In News:

- Unified bilateral air traffic pact: The United Arab Emirates (UAE) is in favour of India's proposal for a unified bilateral air traffic pact provided the Gulf nation gets access to more Indian airports.
- India has signed separate agreements with emirates of the UAE which is a unique arrangement as bilateral air traffic rights are generally signed between two countries.
- India has an agreement each with Abu Dhabi, Dubai, Ras al-Khaimah and Sharjah.

#### **Global Practice:**

 Countries sign air service agreement bilaterally which decides the equal number of flights or seats per week that can fly into each other's country depending upon their own requirements. Then, the government distributes the allocated seats to the respective airlines.

#### Present Scenario:

- Airlines from India and UAE are entitled to fly around 1.34 lakh seats a week from both sides at present.
- Airlines from India and Dubai have exhausted their bilateral entitlement.
- Dubai has been constantly demanding more entitlements, where as India has refrained from renewing its present bilateral agreement due to lack of viable slots available for Indian carriers in Dubai.

## India-Germany

#### Modi, Merkel nudge FTA, sign a dozen agreements

**Context:** Prime Minister Narendra Modi's visit to Germany

#### <u>In news:</u>

 India and Germany signed a dozen wide-ranging but low-profile MoUs on the subjects of education, health, skill development and sustainability.

#### 1. ASEAN wants stronger ties with China

#### What's in news?

#### Manila summit highlights:

- The 10-member Association of South East Asian Nations (ASEAN) has focussed on a regional trade (the Regional Comprehensive Economic Partnership) pact and shoring up economies of some of the lesser developed countries in the grouping.
- Summit took note of the improving cooperation between ASEAN and China.
- It welcomed the progress to complete a framework of the code of conduct in the South China Sea by mid-2017.

#### Code of conduct:

- The code is a non-binding document that urges selfrestraint and resolution of disputes through direct negotiations
- The document welcomed the operationalisation of the Guidelines for Hotline Communications among senior officials of the ministries of foreign affairs of ASEAN countries and China in response to maritime emergencies.
- The leaders focused on the Regional Comprehensive Economic Partnership (RCEP) negotiations, pointing out that the giant free trade pact will boost global trade. The RCEP is a proposed free trade agreement between ASEAN and six other states — Australia, China, India, Japan, South Korea and New Zealand. The document highlighted a commitment to assist Cambodia, Laos, Myanmar and Vietnam to enable them to bolster regional integration.
- The leaders reiterated their full support for the denuclearisation of the Korean Peninsula, and for concerned parties to explore all avenues for immediate dialogue.

## Key Fact:

- The ASEAN comprises Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.
- wishing to operate in India must follow.

#### Attack on minorities:

- The government also faced criticism on violence against religious minorities from a number of countries.
- Pakistan's statement was the sharpest, accusing India of failing to protect minorities "especially Muslims" from "mob violence" and "attacks by extremist groups affiliated to the government."
- Attacks on Africans in India appeared as a new subject of concern at the HRC proceedings.

#### UN Additional Convention Against Torture (CAT):

- Nearly all 112 countries at the 5-yearly review of India's record called for India to ratify the UN Additional Convention Against Torture (CAT).
- India is one of only nine countries which haven't yet implemented the Torture convention, despite signing on to it in 1997.
- In 2012, India had also given a unilateral pledge to ratify CAT, but has yet to move forward on it, despite a Supreme Court directive in the matter.

#### <u>Basic Information</u>: UN Additional Convention Against Torture (CAT)

- The Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (commonly known as the United Nations Convention against Torture) is an international human rights treaty, under the review of the United Nations that aims to prevent torture and other acts of cruel, inhuman, or degrading treatment or punishment around the world.
- The Convention requires states to take effective measures to prevent torture in any territory under their jurisdiction, and forbids states to transport people to any country where there is reason to believe they will be tortured.

### 2. <u>Space for all: South Asia satellite launch a positive</u> <u>signal to the neighbourhood</u>

#### Key Points :

- By propelling the GSAT-9 'South Asia satellite', India has reaffirmed the Indian Space Research Organization's logical ability, yet the informing is maybe more geopolitical than geospatial.
- India has most likely picked up goodwill over the subcontinent through the motion, and the minute was perfectly caught by the videoconference that took after the dispatch, demonstrating all SAARC pioneers (except for Pakistan's) as one on one screen as they talked about the advantages they would get in correspondence, telemedicine, meteorological estimating and broadcasting.
- The Belt and Road Initiative is a foundation system that each SAARC country other than India has marked on to.
- At long last, by proceeding with the venture in spite of Pakistan's choice to haul out, the Modi government is flagging that it will proceed with its arrangements for the area — 'SAARC short one' — if vital.
- This vision was managed a minor blow as of late when Bhutan hauled out of the 'smaller than usual SAARC' elective arrangement of an engine vehicles understanding for BBIN (Bangladesh, Bhutan, India Nepal), yet the administration's steadiness demonstrates it won't be dissuaded by the undeniable local requirements of the SAARC gathering.

#### 3. Japan pitches for Chabahar port

 Japan is keen on collaborating with India on projects in Asia and Africa as a counter to China's Belt and Road initiative (B&RI).

#### **Basic Info:**

- India-Iran cooperation in the field of development of infrastructure and regional connectivity including the development of Chabahar Port is in line with the Tehran Declaration (2001) and the New Delhi Declaration (2003).
- Chabahar Port lies outside the Persian Gulf in Iran and will help in expanding maritime commerce in the region.

#### Advantages of Chabahar Port :

Following the Chabahar port development agreement with Iran, India will get access to Eastern transit Corridor to:

- · Eastern part of Iran
- · Afghanistan, which is a landlocked country
- · CIS countries like Turkmenistan, Uzbekistan etc
- Alternative to North South Corridor (Access to Russia and North Baltic countries).

## 4. <u>China, Pakistan ink pacts ahead of Belt and Road</u> <u>Forum summit</u>

#### <u>In news:</u>

- China and Pakistan signed a number of infrastructure agreements to boost cooperation on the \$46 billion China-Pakistan Economic Corridor, including for the development of the strategic Gwadar port.
- The pacts deal with increasing bilateral cooperation within the framework of China's ambitious Silk Road project.

## 5. <u>Xi evokes Panchsheel as India skips meet Sharif</u> <u>underscores need to resolve conflict through talks</u>

#### In news:

 Chinese President Xi Jinping on Sunday proposed five principles of peaceful co-existence or Panchsheel — the brainchild of China, India and Myanmar in the 1950s — as the mantra for advancing the Belt and Road Initiative (B&RI), and as a vehicle for achieving sustainable globalisation.

#### Key Points :

- India has decided to boycott the BRF, as a mark of protest against the infringement of its sovereignty by the China- Pakistan Economic Corridor (CPEC) that passes through Pakistan-occupied Kashmir (PoK).
- India has boycotted Belt and Road Forum (BRF) while other countries such as Japan and Vietnam, which have serious maritime disputes with China, have sent highlevel official delegations, to the BRF.

## 6. <u>North Korea: new long-range missile can carry heavy</u> <u>nuke</u>

#### In news:

- North Korea said the missile "Hwasong-12", it launched over the weekend was a new type of "medium longrange" ballistic rocket that can carry a heavy nuclear warhead.
- Kim Jong Un promised more nuclear and missile tests and warned that North Korean weapons could strike the U.S. mainland and Pacific holdings.
- Each new nuclear test is part of the North's attempt to build a nuclear-tipped long-range missile.
- Mr. Kim said the North would stage more nuclear and missile tests in order to perfect nuclear bombs needed to deal with U.S. "nuclear blackmail."

## 7. North Korea fires missile toward waters near Japan

#### <u>In news:</u>

- North Korea test fired a medium-range ballistic missile-Rodong.
- Missile flew about 1,000 kilometers (one of the longest flights) and landed near Japan's territorial waters.
- The missile landed inside Japan's exclusive economic zone, the 200-nautical-mile offshore area where a nation has sovereign rights for exploring and exploiting resources.
- Prime Minister of Japan, Shinzo Abe response: It imposes a serious threat to Japan's security and it is unforgivable act of violence toward Japan's security.

#### Terminal High-Altitude Area Defense, or THAAD:

- Terminal High Altitude Area Defense (THAAD), formerly Theater High Altitude Area Defense, is a United States Army anti-ballistic missile defense system designed to shoot down short, medium, and intermediate range ballistic missiles in their terminal phase by intercepting with a hit-to-kill approach.
- U.S has installed this system in South Korea, to cope up with North Korea's increasing military threats.
- North Korea called the system a provocation that it says is only aimed at bolstering U.S. military hegemony in the region.

#### 8. An Abe-Modi plan for Africa

#### In news:

 The Indian and Japanese governments unveiled a vision document for the Asia Africa Growth Corridor, proposed by the two countries' Prime Ministers last November, and more details are likely to be firmed up by September in time for Japan PM Shinzo Abe's visit to New Delhi.  Unlike China's One Belt One Road (OBOR) project, about which India has raised several concerns, the Asia Africa Growth Corridor is conceived as a more open and inclusive programme that will be based on more consultations and keep people as the centre piece rather than just trade and economic ties.

#### Four key elements:

- a. Enhancing capacity and skills;
- b. Building quality infrastructure and connecting institutions;
- c. Development and cooperation projects in health, farming, manufacturing and disaster management; and
- d. People-to-people partnerships.
- Greater cooperation between Indian and Japanese firms in furthering Africa's development and Indian investors to participate in the new economic zone coming up around Kenya's Mombasa port with Japan's assistance.

#### 9. U.S. proposes cut in aid to Pak.

#### In news:

- Pakistan will be among several countries that will be affected if cuts in military aid to partners proposed by the White House is passed by Congress.
- The Trump administration has proposed that the military aid to Pakistan in 2018 be reduced to \$100 million from \$265 million in 2017.
- The \$100 million under foreign military funding is to help Pakistan buy military hardware.
- With other programmes added, total assistance proposed for Pakistan next year amounts to \$344 million, which is also a **substantial reduction.**
- The reduction could affect Pakistan's army, navy and air force and diminish its ability to patrol the maritime border.

#### May dent war on terror:

• The proposed cuts could impact Pakistan's ability to fight terrorist organisations in the region

#### Conversion to loans:

- The Trump administration has also proposed that the military grants may be converted to loans wherever appropriate.
- The proposed system will require partner countries to buy American weaponry with the loans before paying the money back to America.
- If implemented, the new system could drive many countries to America's rivals such as China and Russia for military hardware and the State Department bureaucracy is opposed to it.

#### 10. <u>G7 leaders divided on climate change, closer on trade</u> issues

#### In news:

#### Highlights of G7 meet

- The 43rd G7 summit was held on May 26–27, 2017[1] in Taormina (ME), Sicily, Italy
- U.S. President Donald Trump backed a pledge to fight protectionism on, but refused to endorse a global climate change accord, saying he needed more time to decide.

#### Basic Information: G7

- The Group of 7 (G7) is a group consisting of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States. The European Union is also represented within the G7.
- These countries are the seven major advanced economies as reported by the International Monetary Fund: the G7 countries represent more than 64% of the net global wealth (\$263 trillion).
- A very high net national wealth and a very high Human Development Index are the main requirements to be a member of this group.
- The G7 countries also represent 46% of the global GDP evaluated at market exchange rates and 32% of the global purchasing power parity GDP.

## **INTERNAL SECURITY AND DEFENCE RELATED DEVELOPMENTS**

### 1. Two M777 howitzers arrive from U.S

#### What's in news?

- The Army took delivery of two M777 ultralight howitzers from the U.S. under a contract signed in 2016.
- The guns will be put through trials before induction into the Indian arsenal.

#### M777 howitzers:

• First modern 155-mm artillery guns to be inducted.

#### Dhanush:

- Dhanush, an upgraded and indigenous version of the Bofors gun, is in the final stage of trials and induction is slated to begin soon.
- Development of a new gun, the Advanced Towed Artillery Gun System (ATAGS), under a public-private partnership (PPP) model jointly by the public and the private sector is progressing well.
- The Bofors guns, which was found effective during the Kargil war, continue to be the mainstay.

#### 2. Army set to get 11 attack helicopters

#### What's in news?

- <u>Apache multi-role attack helicopters</u>: The Boeing AH-64 Apache American four-blade, twin-turboshaft attack helicopter and is the most advanced multi-role heavy attack helicopter in the world.
- <u>Deal with U.S</u>: Under a \$3-billion deal, India has contracted 22 Apache attack helicopters and 15 **Chinook heavy-lift helicopters** through the Foreign Military Sales program.
- Presently, India operates a mix of Russian Mi-25 and Mi-35 attack helicopters which are with the IAF.
- The Army has placed a firm order for 114 indigenously developed Light Combat Helicopters (LCH), which is in an advanced stage of induction, and has also ordered Rudra helicopters, the weaponised variant of the Advanced Light Helicopter (ALH).

## 3. <u>Army successfully test-fires Brahmos land-attack</u> <u>missile</u>

#### What's in news?

- The Indian Army successfully test fired an advanced version of the Brahmos land-attack cruise missile in the Andaman and Nicobar Islands, revalidating the weapon's strike capability.
- The land-to-land configuration of Brahmos missile was launched from a mobile autonomous launcher

 The test firing of the block-III version of the missile demonstrated the weapon's unmatched lethality of hitting the centre of a designated target with "bull's eye" precision.

## 4. BrahMos missile achieves rare feat

## What's in news?

- The Army carried out a successful test of the advanced BrahMos Block III Land Attack Cruise Missile (LACM) in the Andaman and Nicobar Islands.
- <u>Range</u>: It brings the strategic Malacca straits under its control.
- <u>Importance</u>: Precise capabilities of BrahMos missile for quick sea access and denial in the event of a conflict, and its testing in the Andaman Sea is a reflection of the changing dynamics in the Indian Ocean.

#### Key Fact:

- BrahMos is a product of joint collaboration between India and Russia and is capable of being launched from land, sea, sub-sea and air against surface and sea-based targets.
- The range of the supersonic missile was initially capped at 290 km as per the obligations of the Missile Technology Control Regime (MTCR). Since India's entry into the club, the range has been extended to 450 km and the plan is to increase it to 600km.

#### The Missile Technology Control Regime (MTCR):

 The Missile Technology Control Regime (MTCR) is a multilateral export control regime. It is an informal and voluntary partnership among 35 countries to prevent the proliferation of missile and unmanned aerial vehicle technology capable of carrying above 500 kg payload for more than 300 km.

#### 5. More Akash systems for Army

#### What's in news?

 Defence Acquisition Council (DAC) chaired by Defence Minister Arun Jaitley decided to procure two additional regiments of the indigenously developed Akash missile systems.

#### **Basic information:**

 Akash is a medium-range mobile surface-to-air missile defense system developed by the Defence Research and Development Organisation (DRDO), Bharat Dynamics Limited (BDL) for Missile Systems, Ordnance Factories Board and Bharat Electronics (BEL) for other Systems in India.

- The missile system can target aircraft up to 30 km away, at altitudes up to 18,000 m.
- It has the capability to "neutralise aerial targets like fighter jets, cruise missiles and air-to-surface missiles" as well as ballistic missiles. It is in operational service with the Indian Army and the Indian Air Force.

#### 6. Minesweeper deal to be inked soon

#### What's in news?

- India and South Korea ready to finalise pact for 12 minesweepers or Mine Counter Measure Vessels for the Navy.
- Mine Counter Measure Vessels ships would be manufactured in India under Transfer of Technology.
- Minesweepers are crucial to detect mines and explosives planted by the enemy targeting our ships as they enter or leave harbours
- Discussions are underway between Goa Shipyard Limited, which has been nominated as the yard for construction by the government, and Kangnam Corporation of South Korea. The GSL has already created necessary infrastructure and facilities to build the vessels.

#### 7. Push for private sector in defence production

#### What's in news?

- The Government has accelerated efforts to finalise the ambitious Strategic Partnership (SP) model, which would give a major boost to private sector participation in defence manufacturing.
- The policy, which is part of the Defence Procurement Procedure (DPP) 2016, will set out guidelines on how major Indian private sector companies can tie up with global Original Equipment Manufacturers in critical military systems and platforms.
- The final clearance would be accorded by the Defence Acquisition Council (DAC).

#### **Defence Acquisition Council:**

- The Government has set up a Defence Acquisition Council headed by the Defence minister for decision making in regard to the totality of the new planning process, which inter-alia involves according 'in principle' approval of Capital Acquisitions in the long term perspective plan and according 'in principle' approval for each Capital Acquisition programme.
- The decision flowing from the Defence Acquisition Council are to be implemented by the following three Boards:
  - a. Defence Procurement Board headed by the Defence Secretary;
  - b. Defence Production Board headed by the Secretary (Defence Production);

c. Defence Research & Development Board headed by the Secretary (Defence Research & Development).

#### 8. Private firms eye key defence role

#### What's in news?

- Defence Acquisition Council, chaired by Defence Minister Arun Jaitley approved the "broad contours of a policy aimed at engaging the private sector in the manufacture of high-tech defence equipment in India,"
- DAC has approved four platforms in which the private sector will play a key role in the first stage: fighter aircraft, submarines, armoured vehicles and helicopters.

#### **Objectives of policy:**

- The policy is aimed at developing the defence industrial eco-system in the country via the involvement of both the major Indian corporates as well as the MSME sector.
- The policy aims to establishment of "long-term strategic partnerships with qualified Indian industry majors through a transparent and competitive process wherein the Indian industry partners would tie up with global OEMs (original equipment manufacturer) to see technology transfers and manufacturing knowhow to set up domestic manufacturing infrastructure and supply chains"
- Policy will contribute to the building of **self-reliance** in the vital sector of national security requirements.

## 9. <u>Cyberattacks using leaked NSA hacking tool affect 12</u> <u>nations</u>

#### What's in news?

- An extensive cyberattack struck computers across a wide swath of Europe and Asia and strained the public health system in Britain, where doctors were blocked from patient files and emergency rooms were forced to divert patients.
- The attack involved ransomware, a kind of malware that encrypts data and locks out the user.
- According to security experts, it exploited a vulnerability that was discovered and developed by the National Security Agency.
- <u>Hackers involved</u>: The hacking tool was leaked by a group calling itself the Shadow Brokers, which has been dumping stolen NSA hacking tools online beginning last year.
- Among the many other institutions that were affected were hospitals and telecommunications companies across Europe, Russia, Asia and beyond.
- <u>Ransomware</u> simple ransomware may lock the system in a way which is not difficult for a knowledgeable person to reverse, and display a message requesting payment to unlock it. More advanced malware encrypts the victim's files, making them inaccessible, and demands a ransom payment to decrypt them.

#### 10. India largely safe from cyberattack

**Context:** Malware attacked police cyber networks in Andhra Pradesh.

- Microsoft had released a patch against flaw in March but many system administrators failed to patch all computers and the ones which were unpatched became vulnerable to this attack.
- The police system in Andhra Pradesh was impacted because they were using an older version of Microsoft operating system and poor patch maintenance.
- <u>Kaspersky response</u>: visibility of malware may be limited and incomplete and the range of targets and victims is likely much, much higher.

#### Key fact:

- WannaCry has the ability to spread itself within corporate networks, without user interaction, by exploiting a known vulnerability in Microsoft Windows.
- Computers which do not have the latest Windows security updates applied are at risk of infection
- Once the ransomware encrypts data files on the affected computer, it asks users to pay the ransom in bitcoins.
- While the initial payment demanded is of \$300, the ransom note indicates that the payment amount will be doubled after three days. If payment is not made after seven days, the encrypted files will be deleted.

#### **Basic Information:**

- A patch is a piece of software designed to update a computer program or its supporting data, to fix or improve it. This includes fixing security vulnerabilities and other bugs, with such patches usually called bugfixes or bug fixes, and improving the usability or performance. Although meant to fix problems, poorly designed patches can sometimes introduce new problems (see software regressions).
- <u>WannaCry:</u> is a ransomware program targeting Microsoft Windows. In May 2017, a large cyber-attack using it was launched, infecting over 230,000 computers in 99 countries, demanding ransom payments in bitcoin in 28 languages. The attack has been described by Europol as unprecedented in scale.

## 11. WannaCry spreads tears globally

#### In News:

- Virulent computer malware spreading across the globe has hit government departments, universities and companies in nearly 100 countries.
- The WannaCryptor 2.0 'ransomware', / WannaCry, spreads using a flaw in older Microsoft Windows systems

#### **Biggest hit:**

 The biggest hit has been the U.K.'s National Health Service, which has been forced to halt treatments and surgeries.

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- Reported attacks in Japan, Indonesia, South Korea, Spain, Germany, China, France, England and Russia
- Several cyber security firms have identified this as the biggest cyberattack in over a decade, after the Conficker worm infected millions of computers.

#### What is ransomware?

- It is malware that encrypts the files on an infected system and then demands a ransom to decrypt them, with escalation in the demand over time.
- The ransom demand is in Bitcoins, the cyber cryptocurrency that is hard to trace.
- The WannaCryptor 2.0 has been asking a ransom of the Bitcoin equivalent of \$300.

#### How it spreads?

- · It often reaches victims as mail attachment.
- Once opened, it spreads to other computers in the network exploiting the Windows vulnerability.
- It originates from a tool called EternalBlue that was among the NSA-related tools dumped online in April by an anonymous group, Shadow Brokers.

#### 12. Malware continues to wreak havoc

#### In News:

- The worldwide "ransomware" cyberattack spread to thousands of more computers as people logged in at work, disrupting business, schools, hospitals and daily life, though no new large-scale breakdowns were reported.
- The full extent of the damage from the cyberattack felt in 150 countries was unclear and could worsen if more malicious variations of the online extortion scheme appear.
- The initial attack, known as "WannaCry," paralysed computers running factories, banks, government agencies and transport systems in scores of countries, including Russia, Ukraine, Brazil, Spain, India and Japan, among others.

#### 13. DRDO's aero test range to be inaugurated tomorrow

#### In News:

- Location: near Challakere in Chitradurga district, Karnataka.
- The Aeronautical Test Range is a facility under the Aeronautical Development Establishment (ADE) which works on a range of UAVs (unmanned air vehicles).
- It will be an integrated test centre for the DRDO's cluster of aeronautical laboratories, most of them based in

Bengaluru.

- DRDO used the ATR to conduct the first successful flight of the UAV 'Tapas' 201, earlier called Rustom-2.
- Tapas is a MALE or medium altitude, long endurance UAV that can continuously, slowly watch over a 200km area for 24 hours. The pictures it captures will be interpreted by the armed forces or security.

# **IMPORTANT TOPICS FOR MAINS**

## **Belt and Road Initiative - India's absence**

Why is India staying away?

- Four years after it announced to the world that it was planning a mega project to revive the old Silk route for trading, with a corridor for infrastructure, trade, energy and telecommunications, China brought together leaders and officials of 130 countries, 68 of which they claimed had already signed on to the Belt and Road Initiative (B&RI) project. Several participant countries sent their heads of state, others like Japan and the U.S., who aren't part of the initiative, sent senior officials, but India sent no one, not even a local embassy official to take notes. Directives were also issued by the Ministry of External Affairs that anyone from think-tanks, business chambers, and other Ministries would have to take clearance if they were travelling for the B&RI Forum.
- Just hours before the forum was due to open in Beijing, the MEA issued a comprehensive statement on its objections to the B&RI, which were three-fold : One, the B&RI's flagship project is the China-Pakistan Economic Corridor, which includes projects in the Gilgit-Baltistan region, ignoring India's "sovereignty and territorial integrity". Two, the B&RI infrastructure project structure smacks of Chinese neo-colonialism, and could cause an "unsustainable debt burden for communities" with an adverse impact on the environment in the partner countries. And three, there is a lack of transparency in China's agenda, indicating that New Delhi believes the B&RI is not just an economic project but one that China is promoting for political control.
- All of India's neighbours, with the exception of Bhutan, have entered the B&RI, and India's concerns have been heightened by the growing presence of China in Nepal, Bangladesh, Sri Lanka and the Maldives.

#### What is the main objection?

India's main objection is on the principle that the B&RI includes projects in the China-Pakistan Economic Corridor (CPEC) that are located in the Pakistan-occupied Kashmir's Gilgit Baltistan, including the Diamer Bhasha Dam, 180-MW hydel power projects, and more expressways and economic zones along the Karakoram Highway built in the 1970s. Ever since the announcement of the CPEC in April 2015, India has made those concerns felt, beginning with Prime Minister Narendra Modi's visit to China just weeks after and External Affairs Minister Sushma Swaraj raising the issue at the UN General Assembly that year. However, India didn't explicitly say it would not join the B&RI, leaving room for speculation that there was place for talks on the issue, if the Chinese were willing to discuss alternate routing. If not, India made

it clear during talks in February 2017 that it couldn't either join the project or even attend the forum with the B&RI map showing Gilgit Baltistan in Pakistan as part of a 'China-Pakistan Economic Corridor.'

### Chinese efforts to include India in B&RI :

- India claims that China has not only been insensitive to its sovereignty, but has never fully explained its plan for the Belt and Road (formerly called One Belt One Road) initiative. China's reply has been that none of the other countries in the project has complained about lack of transparency. Chinese and Indian officials have spoken about the project a few times, but India remains unconvinced.
- In May, about 10 days before the forum, China's Ambassador to India Luo Zhaohui gave a speech at a military think-tank with a four-point initiative to improve tense ties between India and China, including a suggestion that China was open to renaming the CPEC if that would resolve India's B&RI problem. Foreign Minister Wang Yi also said that if sovereignty alone was the issue, China could work around it as it had during the China-Pakistan border dispute of 1963, in which they agreed that all negotiations were subject to re-negotiation after the "settlement of the Kashmir dispute." China also pointed out that India is a co-founder of the Asian Infrastructure Investment Bank, which will support many B&RI projects, and also remains committed to the Bangladesh, China, India, Myanmar economic corridor, which connects to the B&RI. But it was possibly too late by then, and India's decision was made.

#### Sri Lanka has backed India's concern :

 Sri Lanka, which attended the just concluded Belt and Road Forum here, has backed India's concern over the Kashmir issue, saying it is difficult for New Delhi to accept the USD 50 billion China-Pakistan Economic Corridor (CPEC) as it goes through the "heart of Indian interests".

#### Arguments for joining the B&RI :

Each of India's neighbours, with the exception of Bhutan, has signed up for the B&RI, expecting to see billions of dollars in loans for projects including roads, rail, gas pipelines, oil pipelines, electricity and telecommunications connectivity. India's anxiety about the possible debt trap may be wellfounded, but it ignores the benefits these countries believe will accrue from the project. Simply put, India cannot appear to be more worried about these countries than their own governments are, or to determine their stance. As a friend and neighbour, India can at best alert them to the perils of the B&RI, and offer assistance should they choose another path. India may also face some difficult choices in the road ahead, because as a co-founder of the Asian Infrastructure Investment Bank and as a member of the Shanghai

Cooperation Organisation (from June 2017) it will be asked to support many of the projects under the B&RI.

• At such a point, especially given the endorsement from the UN Secretary General, who said the B&RI is rooted in a shared vision for global development, India should not simply sit out the project.

#### Conclusion and way forward :

 It must actively engage with China to have its particular grievances addressed, articulate its concerns to other partner countries in a more productive manner, and take a position as an Asian leader, not an outlier in the quest for more connectivity.

## Aadhar and its linkage

- The government has linked Aadhar for delivery of various public goods and services. It has maintained that the move is to ensure effective delivery of public goods while reducing leakages.
- So far, the Centre has identified 31 schemes where the Aadhaar number can be used as identification for providing various benefits. A senior government official said the Ministries will either ask all beneficiaries to furnish Aadhaar details for receiving benefits under Central government schemes or will help them get enrolled under Aadhaar.
- Some of the identified schemes include direct cash transfer of food subsidy under the National Food Security Act, supplementary nutrition to children below six and pregnant mothers, along with monthly honorarium for anganwadi workers under the Integrated Child Development Services, and subsidy on housing loans under the Pradhan Mantri Awas Yojana (Grameen).
- However, there is uncertainty over the 11 schemes of the HRD Ministry identified to be covered under the Aadhaar Act.
- The proposed notification to link two centrally sponsored student scholarship schemes – to promote enrolment of girl child and economically weaker sections in schools – with Aadhaar has been put on hold after the Supreme Court stayed the mandatory use of Aadhaar in one of the scholarship schemes of West Bengal in September.
- In the December meeting, the Cabinet Secretariat asked the Unique Identification Authority of India (UIDAI), the nodal body assigned to roll out Aadhaar all over the country, to "expedite and take the opinion of the Attorney General in respect of notifications to be issued for [two] scholarship schemes at the earliest."
- The Cabinet Secretariat asked the HRD Ministry to "expedite preparation of draft notification in respect of the remaining nine schemes" such as Mid-Day Meal Scheme and Sarva Shiksha Abhiyan.
- The Human Resource Development (HRD) Ministry has expressed concern over the Centre's push to link the

- In a recent inter-ministerial meeting, the Department of School Education and Literacy (DSEL), under the HRD Ministry, said the decision to use the Aadhaar number as an identification document for receiving benefits under various school-related schemes needs more deliberation.
- As the schemes are huge, impacting education of children across the country, the matter has to be examined in greater detail.

#### Case of linking Aadhar with PAN Card :

- The Income Tax Department has launched an e-facility to link Aadhaar with Permanent Account Number (PAN), a mandatory procedure for filing IT returns now.
- The provision makes Aadhaar mandatory for getting a PAN. Possession of Aadhaar card is necessary for the continuing validity of an existing PAN and for filing returns under the income tax law.
- While critics term linking Aadhaar with PAN under Section 139 AA of the I-T Act — an attempt to dilute civilian liberties, the Centre has emphatically assured the Supreme Court that biometrics of Aadhaar cardholders were safe and had not fallen into other hands.

#### Criticism for linking Aadhar with Pan Card :

- Linking Aadhaar with essential activities of life, such as opening a bank account, filing returns and buying property or a vehicle, would turn the "entire nation into one large concentration camp where citizens are under State surveillance round-the-clock."
- The critics claimed that the mandatory linking of Aadhaar to PAN under the newly-included Section 139AA of the Income Tax Act is a "direct invasion" by the state into the citizens' right to make free, voluntary and informed consent.
- Critics argued that Section 139AA is a "chilling trajectory the State has taken to dilute civil liberties." It completely takes away one's political and personal choices.
- Critics argued that there was indeed a direct collision between the voluntary nature of the Aadhaar Act of 2016 and Section 139AA which made it mandatory for a person to possess an Aadhaar card to file income tax returns and continue to have a valid PAN.

#### Government arguments :

- Mandatory linking of Aadhaar with PAN cannot be considered discriminatory merely because there are "conscientious objectors" who refuse to take the Aadhaar in the name of freedom of choice, privacy and fundamental rights enshrined in the Constitution.
- The 113.7 crore Aadhaar cards produced so far is proof that people are eager to enroll. Even in PAN, though 29 crore PAN cards were produced, there were only five crore assesses. The rest 24 crore PAN card holders had taken PAN to use it as a unique identity proof.

- Duplication of Aadhaar is "non-existent" unlike in PAN. "Despite the critics' argument that Aadhaar cards were made with photographs of Hanumanji, etc, these are not cases of duplication and cheating as seen in PAN. These must have been some unintended mistake.
- Countering arguments made that fingerprint and iris impressions would be used to mount a State surveillance and the "nation would turn into a large concentration camp", government submitted that the mandatory linkage of PAN with Aadhaar was a step towards a "more orderly world".
- There is nothing wrong in the State collecting fingerprints to help prevent or to aid solving a crime.
- The PAN was also included in 1975 in the Income Tax Act under Section 139A as a unique identification proof. But, PAN became a leaky system as time passed and drug and balck money laundering came to fore.
- The mischief a person can do with duplication or faking one PAN will be in thousands of crores. Money is laundered through shell companies using multiple PANs. PAN has become more and more suspect. Government cancelled at least 10 lakh PANs through random verifications done. India need a robust system.
- Slamming a tendency in the country to evade taxes, the Supreme Court referred to the mandatory linking of Aadhaar to the Permanent Account Number (PAN) and Income Tax returns as an instance of the government's efforts to bring "new and new laws to stop leakages."
- Aadhaar was foolproof as PAN was in 1975. Biometric technology is the best system in 2016.
- The government said Aadhaar, rather than causing inequality, bolstered equality between honest taxpayers and those who had till now evaded tax.

#### Conclusion :

• While linking of Aadhar to PAN card has various advantages as mentioned above, the government must try to address security of data of citizens especially in the era of more digitized world.

## Recent Cow slaughtering ban and its various angles - Constitutional dimensions and SC rulings

## Context :

In the course of the most recent days, the Central government's new Prevention of Cruelty to Animals (Regulation of Livestock Market) Rules have keep running into solid headwinds. These rules, which adequately forbid the offer of cows and buffalo for slaughter at animal markets, and are hence seen as forcing a roundabout beef ban, have been the subject of challenges in Kerala and Tamil Nadu, and have drawn solid judgment from West Bengal Chief Minister Mamata Banerjee. With the Madras High Court on May 31st 2017, remaining the guidelines for four weeks, the fight has quickly moved to the court also. Furthermore, with this, aside from the political turmoil, legitimate and protected blame lines have additionally been revived, creating much instability about what the result will be.

## What the Prevention of Cruelty to Animals (Regulation of Livestock Markets) Rules, 2017 say :

- Centre notifies rules to prevent sale of cows, buffaloes and other bovines for slaughter at markets.
- Under a notification, titled the Prevention of Cruelty to Animals (Regulation of Livestock Markets) Rules, 2017, the individuals who wish to sell cattle — bulls, cows, wild oxen, cows, calves and camels — may do as such simply after they formally express that the animals have not been broght to the market available to be purchased for slaughter.
- In the meantime, purchasers of cows at animal markets should check they are agriculturalists and pronounce that they won't sell the animal/s for a time of six months from the date of procurement.
- The rules, notified by the Ministry of Environment, Forest and Climate Change on May 23, demand that buyers "follow the State cattle protection and preservation laws" and "not sacrifice the animal for any religious purpose". They also prohibit cattle purchased from animal markets being sold outside the State, without permission.
- Monitoring committees at the State and district levels will be set up to implement the rules and monitor the functioning of animal markets. Such markets will be identified and registered; any new market that is set up will need the approval of the District Animal Market Monitoring Committee, which will be chaired by the Collector or District Magistrate.
- To restrain smuggling, animal markets may not work inside 25 kilometers of a State fringe and 50 kilometers of a worldwide outskirt.

#### Government stand :

• The new rules banning the sale and purchase of cattle from animal markets for slaughter aim at regulating such markets and also the sale of bovines.

 The aim of the rules is only to regulate the animal market and sale of cattle in them and ensure welfare of cattle dealt in them.

#### Impact on industry :

- While individuals have not been prevented from selling cattle for slaughter, representatives from the meat and livestock industry have expressed serious concern about the impact of the notification. Representatives from the industry have asked for a meeting with Central government ministers and senior officials including in the Ministry of Environment, Forest and Climate Change to inform them about the adverse impact on industry, employment as well as the export sector.
- According to industry 90% of buffaloes are sourced from mandis by middlemen for sale in slaughterhouses against a mere 10% that is bought directly from farmers. While the Centre is empowered to frame rules, implementation of the regulation of livestock falls under the State government's ambit.

#### Notification comes after SC directive :

- The notification banning the sale of cattle for slaughter at animal markets under the Prevention of Cruelty to Animals (Regulation of Livestock Markets) Rules, 2017, issued on 26th May, follows a Supreme Court directive to the government to form an inter-ministerial committee to recommend ways of preventing cattle smuggling.
- The SC directive itself was in response to a 2014 writ petition by Gauri Mulekhi of People for Animals.
- The committee recommended, among other things, rules to be framed under the Prevention of Cruelty to Animals Act 1960 to regulate livestock markets.
- The rules will go a long way in weeding out "middlemen" from the supply chain linking farm-heads to slaughter houses. This will improve traceability (of zoonotic diseases), curb illegitimate slaughter and smuggling and, put the onus on cattle-owners to dispose of their animals responsibly.
- The notification also contains a slew of provisions to prevent the cruel transport and treatment of animals. Prohibited practices that are cruel and harmful include sealing teats of the udder using any material such as adhesive tapes to prevent the calf from suckling, putting any ornaments or decorative materials on animals, using any type of muzzle to prevent animals from suckling or eating food and injecting oxytocin into milch animals.

#### SC had taken varied positions on cattle issue :

- For years, the Supreme Court has struggled for consistency in its judicial pronouncements regarding cattle, leaving it ultimately to the Centre and States to devise an appropriate policy.
- While Supreme Court banned the bull-running sport jallikattu as cruel, it refused to intervene with States to frame a uniform policy on cattle slaughter. Neither did the court deem it fit to examine a plea to ban animal sacrifices

#### for religious purposes.

#### Debate In the Constituent Assembly :

- This dispute has a history, which goes back to the founding of the Republic. During the framing of the Constitution, the subject of cow slaughter was one of the most fraught and contentious topics of debate. Seth Govind Das, a member of the Constituent Assembly, framed it as a "civilisational [problem] from the time of Lord Krishna", and called for the prohibition of cow slaughter to be made part of the Constitution's chapter on fundamental rights, on a par with the prohibition of untouchability. In this, he was supported by other members of the Constituent Assembly, such as Shibban Lal Saksena, Thakur Das Bhargava, Ramnarayan Singh, Ram Sahai, Raghu Vira, R.V. Dhulekar and Chaudhari Ranbir Singh. Proponents of a cow slaughter ban advanced a mix of cultural and economic arguments, invoking the "sentiments of thirty crores of population" on the one hand, and the indispensability of cattle in an agrarian economy on the other.
- There was one small, snag, however: fundamental rights were meant to inhere in human beings, not animals. After much debate, the Constitution's Drafting Committee agreed upon a compromise: prohibition of cow slaughter would find a place in the Constitution, but not as an enforceable fundamental right. It would be included as a "Directive Principle of State Policy", which was meant to guide the state in policymaking, but could not be enforced in any court. Furthermore, in its final form, this Directive Principle (Article 48 of the Constitution) carefully excluded the question of religious sentiments. Nor did it require the state to ban cow slaughter outright. Instead, under the heading "Organisation of Agriculture and Animal Husbandry", Article 48 says the state shall "organise agriculture and animal husbandry on modern and scientific lines and shall, in particular, take steps for preserving and improving the breeds, and prohibiting the slaughter, of cows and calves and other milch and draught cattle."

#### Conclusion :

 What this has resulted in is a badly drafted set of rules, which is unlikely to withstand judicial scrutiny. It is also, however, an opportunity for citizens — and courts — to think once again whether the prescription of food choices is consistent with a Constitution that promises economic and social liberty to all.

## Was it right on the part of Army to use Human shielding ?

#### Context :

- The video of Mr. Dar being tied in front of the Army vehicle in Budgam district on the eve of polling had evoked sharp reactions, including from several retired military officials.
- The Army has ordered a Court of Inquiry (Col) against the officer who ordered stone pelter Farooq Ahmed Dar to be tied up in front of a vehicle as a human shield in Kashmir on April 9.
- Mr. Dar is said to have told investigators that he had gone to cast his vote and thereafter was on his way to his sister's house, where a bereavement had taken place. On his way to his sister's village, he was caught by Army personnel who wanted to enter Beerwah village along with the polling staff, the officials said.
- Taking cognisance of a complaint alleging rights violation in the 'human shield' incident involving the Army in Jammu and Kashmir, the National Human Rights Commission (NHRC) has sought a report from the Defence Ministry seeking details of the action taken on it.

#### Army stand and its justification :

- Several government functionaries too had defended the decision by the officer saying it saved the lives of poll officials.
- Maj. Gogoi was awarded for his sustained efforts in counterinsurgency operations.
- The Army announced that the Major who tied a Kashmiri to a military vehicle as a precaution against pelting of stones has been awarded a commendation by Army Chief General Bipin Rawat.
- The Army Chief's decision comes even as the Court of Inquiry (CoI) against Major Leetul Gogoi continues and in the face of intense criticism of the action from various sections, including many within the Army.
- The government defended the action and the Army ordered a Court of Inquiry (Col) to determine the circumstances of the incident.
- The Indian Army is facing a "dirty war" in Jammu and Kashmir, which has to be fought with "innovative" ways, Army Chief Gen. Bipin Rawat has said, defending the use of a Kashmiri man as 'human shield' by a young officer.
- Gen. Rawat said the main objective of awarding Major Leetul Gogoi, when a Court of Inquiry was finalising its probe into the incident, was to boost the morale of young officers of the force who are operating in a very difficult environment in the militancy-infested State.
- The Army Chief's Commendation medal to Maj. Gogoi was criticised by human rights activists, Kashmiri groups and by a few retired Army generals.

- Talking about the complexity of the security challenge in the State, Army Chief suggested it would have been easier for the armed forces if the protesters were firing weapons instead of throwing stones.
- Gen. Rawat, who had served in Jammu and Kashmir extensively, said if people in any country lose fear of the Army, then the country was doomed. "Adversaries must be afraid of you and at the same time your people must be afraid of you. We are a friendly Army, but when we are called to restore law and order, people have to be afraid of us," he said.
- The Army Chief also wondered why not much noise was made when young Army officer Lt. Umar Fayaz was killed by militants when he was on leave and emphasised on the need for taking harsh measures to stop infiltration and counter-terrorism.

#### Views of Human Rights Organizations :

- It amounts to an instance of gross human rights violation, and must officially be called out in clear terms.
- Human shields have often been used cynically by terrorist organisations — the Islamic State uses civilians as shields in its battles, and the LTTE used them in the closing stages of the civil war in Sri Lanka.
- To use a person as a human shield is to abduct him, to hold him hostage, and to potentially put him in harm's way.
- There is no argument that the Army, which is caught in a situation in which terrorists attempt to blend in with the civilian population, is fighting a difficult and unenviable battle.
- But the difficulties in fighting a hybrid war do not constitute a justification for the use of human shields, which is categorised as a war crime by the Geneva Conventions.
- It is true that the polling in Srinagar was held in a hostile environment, the abysmally low 7% turnout being a reflection of local alienation as well as intimidation by militants to keep people away from voting. But the security bandobast was aimed precisely to reassure the people and not to force an 'us vs them' binary.

### Conclusion :

 The Army must expedite the inquiry and act against the erring personnel where warranted. Its response must also publicly affirm its Code of Conduct vis-à-vis civilians, which includes the clause, "Violation of human rights... must be avoided under all circumstances, even at the cost of operational success". To do any less would amount to being a party to rights violations.

# **MISCELLANEOUS NEWS**

#### 1. <u>Soon, ambulance to come to animals' rescue with vet</u> on board

#### What's in news?

- "Gauvansh Chikitsa Mobile Vans" an ambulance service catering exclusively to cows was launched.
- The service will transport ill and injured cows to gau shalas or take them to a veterinary for treatment
- A veterinarian along with an assistant will be present in the ambulance.
- A "gau seva toll-free number" was also launched.
- The service will be available in Lucknow, Gorakhpur, Varanasi, Mathura and Allahabad.

## 2. Centre mulls aerotropolis in Assam

#### What's in news?

- The Centre is planning to build an aerotropolis in Assam and has sought 2,000 acres from the state for the purpose.
- Centre proposed to build an aerotropolis in the state which would bring huge benefits to the region in terms of civil aviation and air connectivity.
- Centre has requested state government to allot 2,000 acres an hour's journey away from Guwahati city near Brahmaputra river.

#### **Basic Information:**

- An aerotropolis is a metropolitan subregion where the layout, infrastructure, and economy are centered on an airport which serves as a multimodal "airport city" commercial core.
- It is similar in form to a traditional metropolis, which contains a central city commercial core and commuterlinked suburbs.
- The engine of the aerotropolis is the airport and its air routes which offer firms speedy connectivity to their distant suppliers, customers, and enterprise partners worldwide.
- The aerotropolis encompasses aviation-dependent businesses and the commercial facilities that support them and the multitude of air travelers who pass through the airport annually.
- Airport-linked businesses include, among others, timesensitive manufacturing, logistics, and e-commerce fulfillment; high-value perishables and biomeds; retail, sports, and entertainment complexes; hotels; conference, trade, and exhibition centers; and offices for business people who travel frequently by air or

engage in global commerce.

## 3. Farakka barrage not to blame for Bihar floods: Uma

## Context:

- Last year, monsoon rains led to severe floods in Bihar and Chief Minister of the state — who petitioned Prime Minister Modi — said decommissioning the 40-yearold, 2.6 km-long Farakka Barrage was the only way out.
- Blame: Farakka Barrage originally conceived to keep the Kolkata port navigable had only worsened the flood situation in Bihar over the years.

#### Union Water Resource Minister innovative solution:

- Union Water Resources Minister, Uma Bharti, has stated that the Farakka Barrage — said to be responsible for aggravating floods in Bihar during the monsoon — is blameless.
- Developing the waterway between Haldia and Allahabad will take care of the silt accumulation in the Barrage.

#### Water Way:

- National Waterway 1 (NW1) will be on the Ganga from Haldia in West Bengal to Allahabad in Uttar Pradesh, stretching 1,620 kilometres. The NW1 will span Uttar Pradesh, Bihar, Jharkhand and West Bengal.
- Project being funded by the World Bank.
- Project also involves constructing barrages.

#### Madhav Chitale Committee:

- Committee, led by retired engineer Madhav Chitale, investigates the problems of siltation in the Ganga.
- Solution: Constuction of navigable water ways.

#### Farakka Barrage

- Barrage across the Ganges River, located in the Indian state of West Bengal, roughly 16.5 kilometres (10.3 mi) from the border with Bangladesh near Chapai Nawabganj District. The barrage is about 2,240 metres (7,350 ft) long.
- The purpose of the barrage is to divert 1,100 cubic metres per second (40,000 cu ft/s) of water from the Ganges to the Hooghly River for flushing out the sediment deposition from the Kolkata harbour without the need of regular mechanical dredging.
- After commissioning the project, it was found that the diverted water flow from the Farakka barrage was not adequate to flush the sediment from the river satisfactorily.

BYJU'S

## 4. 'Tallest bridge built can withstand blasts'

## What's in news?

- The world's tallest railway arch bridge over the Chenab river in Jammu, providing rail connectivity to Kashmir, will be capable of handling high intensity blasts and resisting the worst possible natural disaster.
- The 1.3 km long bridge over the Chenab at a height of 359 metres will be 35m taller than the Eiffel Tower in Paris and five times the height of the Qutab Minar in Delhi.
- The bridge will be a crucial link in the 111-km stretch between Katra (Jammu) and Banihal (Kashmir) which is part of the Udhampur-Srinagar-Baramulla section of the railway project aimed at linking Kashmir through rail with the rest of the country.

#### 5. Southern Bird Wing to be named 'State butterfly'

#### What's in news?

- The Southern Bird Wing butterfly approved to become the "State butterfly" of Karnataka- distinctive red and yellow stripes
- Habitat: the Western Ghats.
- The proposal for the State butterfly was given approval from the State Wildlife Board.

#### Key Fact:

- Karantaka the second State in the country after Maharashtra to adopt a State butterfly.
- Maharashtra chose the **Blue Mormom butterfly** as its State butterfly
- The Southern Bird Wing is the largest butterfly in India, with the females growing up to 190 mm in length. Primarily endemic to South India, it is found in abundance in Karnataka.

#### **Importance of Butterflies:**

- Butterflies are the important members of the ecosystem.
- These are important pollinators, and their preservation is necessary for the eco-system.

#### 6. ISRO gets Indira Gandhi Prize for 2014

#### What's in news?

- The Indian Space Research Organisation (ISRO) presented with the Indira Gandhi Prize for Peace, Disarmament and Development for the year 2014.
- The prize was presented to ISRO Chairman A.S. Kiran Kumar by former Prime Minister and Indira Gandhi Memorial Trust (IGMT) trustee Dr. Manmohan Singh.

#### Award:

• Trophy made of banded Haematite Jasper, with a portrait of the late Prime Minister Indira Gandhi in Jaipur miniature paintings

• Cash award of ₹1 crore and a citation.

#### Why ISRO?

• In recognition of its path-breaking achievements, culminating in the Mars Orbiter Mission and its contributions in strengthening international cooperation.

#### **Basic Information:**

## Indira Gandhi Prize :

- Prestigious award accorded annually by India to individuals or organisations in recognition of creative efforts toward promoting international peace, development and a new international economic order; ensuring that scientific discoveries are used for the larger good of humanity, and enlarging the scope of freedom.
- The prize carries a cash award of 2.5 million Indian rupees and a citation. A written work, in order to be eligible for consideration, should have been published. The panel constituted by the Indira Gandhi Memorial Trust consists of prominent national and international personalities including previous recipients. The recipients are chosen from a pool of national and international nominees.

## 7. <u>India taking part in global disaster risk reduction meet</u> in <u>Mexico</u>

## What's in news?

- India is participating in a five-day long Global Platform for Disaster Risk Reduction (GPDRR) summit being held in Mexico.
- The summit will mark the first opportunity since 2015 to review global progress in the implementation of SFDRR
- It will also provide a platform for all stakeholders to galvanise their efforts in sustainable development and climate change adaptation, sharing of experiences, discussing innovative solutions, and charting out the course for an integrated approach at the international, regional, national and local levels.

## About GPDRR:

• The GPDRR is a global forum for strategic advice, coordination, partnership development and review of progress in the implementation of the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030 which was adopted at the 3rd UN World conference on disaster risk reduction held in March 2015 in Sendai, Japan.

#### 8. New bridge will spur a revolution: Modi

## What's in news?

• Prime Minister Narendra Modi inaugurated the country's longest bridge over the Lohit river in Assam.

## Facts round up:

- 9.15 km-long bridge: Bhupen Hazarika Setu (Dhola-Sadiya), named after Dadasaheb Phalke awardee and legendary lyricist-singer Bhupen Hazarika who hailed from Sadiya.
- It connects Assam (Dhola) and Arunachal Pradesh (Saidya), reduced distance by 165 km and cutting travel time by seven to eight hours.

#### **Basic Information:**

• The Bandra–Worli Sea Link, officially called Rajiv Gandhi Sea Link, is a cable-stayed bridge with pre-stressed concrete-steel viaducts on either side that links Bandra in the Western Suburbs of Mumbai with Worli in South Mumbai.

# **ARTICLES IN NEWS**

## Article 123. Power of President to promulgate Ordinances during recess of Parliament

- If at any time, except when both Houses of Parliament are in session, the President is satisfied that circumstances exist which render it necessary for him to take immediate action, he may promulgate such Ordinance as the circumstances appear to him to require
- 2. An Ordinance promulgated under this article shall have the same force and effect as an Act of Parliament, but every such Ordinance
  - a. Shall be laid before both House of Parliament and shall cease to operate at the expiration of six weeks from the reassemble of Parliament, or, if before the expiration of that period resolutions disapproving it are passed by both Houses, upon the passing of the second of those resolutions; and
  - b. May be withdrawn at any time by the President Explanation Where the Houses of Parliament are summoned to reassemble on different dates, the period of six weeks shall be reckoned from the later of those dates for the purposes of this clause
- 3. If and so far as an Ordinance under this article makes any provision which Parliament would not under this Constitution be competent to enact, it shall be void.

## Article 13. Laws inconsistent with or in derogation of the fundamental rights

- 1. All laws in force in the territory of India immediately before the commencement of this Constitution, in so far as they are inconsistent with the provisions of this Part, shall, to the extent of such inconsistency, be void.
- 2. The State shall not make any law which takes away or abridges the rights conferred by this Part and any law made in contravention of this clause shall, to the extent of the contravention, be void.
- 3. In this article, unless the context otherwise requires law includes any Ordinance, order, bye law, rule, regulation, notification, custom or usages having in the territory of India the force of law; laws in force includes laws passed or made by Legislature or other competent authority in the territory of India before the commencement of this Constitution and not previously repealed, notwithstanding that any such law or any part thereof may not be then in operation either at all or in particular areas.
- 4. Nothing in this article shall apply to any amendment of this Constitution made under Article 368.

## Article 14 Equality before law

The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India.

Article 15 Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth

- 1. The State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth or any of them.
- 2. No citizen shall, on grounds only of religion, race, caste, sex, place of birth or any of them, be subject to any disability, liability, restriction or condition with regard to
  - a. Access to shops, public restaurants, hotels and palaces of public entertainment; or
  - b. The use of wells, tanks, bathing ghats, roads and places of public resort maintained wholly or partly out of State funds or dedicated to the use of the general public.
- 3. Nothing in this article shall prevent the State from making any special provision for women and children.
- 4. Nothing in this article or in clause (2) of Article 29 shall prevent the State from making any special provision for the advancement of any socially and educationally backward classes of citizens or for the Scheduled Castes and the Scheduled Tribes.

## Article 13. Laws inconsistent with or in derogation of the fundamental rights

- 1. All laws in force in the territory of India immediately before the commencement of this Constitution, in so far as they are inconsistent with the provisions of this Part, shall, to the extent of such inconsistency, be void
- 2. The State shall not make any law which takes away or abridges the rights conferred by this Part and any law made in contravention of this clause shall, to the extent of the contravention, be void
- 3. In this article, unless the context otherwise requires law includes any Ordinance, order, bye law, rule, regulation, notification, custom or usages having in the territory of India the force of law; laws in force includes laws passed or made by Legislature or other competent authority in the territory of India before the commencement of this Constitution and not previously repealed, notwithstanding that any such law or any part thereof may not be then in operation either at all or in particular areas
- 4. Nothing in this article shall apply to any amendment of this Constitution made under Article 368

- 5. <u>Article 14.</u> Equality before law The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India.
- <u>Article 21.</u> 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 51A. Fundamental duties It shall be the duty of every citizen of India
  - a. To abide by the Constitution and respect its ideals and institutions, the national Flag and the National Anthem;
  - b. To cherish and follow the noble ideals which inspired our national struggle for freedom;
  - c. To uphold and protect the sovereignty, unity and integrity of India;
  - d. To defend the country and render national service when called upon to do so;
  - e. To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
  - f. To value and preserve the rich heritage of our composite culture;
  - g. To protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;
  - h. To develop the scientific temper, humanism and the spirit of inquiry and reform;
  - i. To safeguard public property and to abjure violence;
  - j. To strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

## Article 356. Provisions in case of failure of constitutional machinery in State

- 1. If the President, on receipt of report from the Governor of the State or otherwise, is satisfied that a situation has arisen in which the government of the State cannot be carried on in accordance with the provisions of this Constitution, the President may be Proclamation
  - Assume to himself all or any of the functions of the Government of the State and all or any of the powers vested in or exercisable by the Governor or any body or authority in the State other than the Legislature of the State;
  - b. Declare that the powers of the Legislature of the State shall be exercisable by or under the authority of Parliament;
  - c. Make such incidental and consequential provisions as appear to the president to be necessary or desirable for giving effect to the objects of the Proclamation,

including provisions for suspending in whole or in part the operation of any provisions of this constitution relating to any body or authority in the State Provided that nothing in this clause shall authorise the President to assume to himself any of the powers vested in or exercisable by a High Court, or to suspend in whole or in part the operation of any provision of this Constitution relating to High Courts

- 2. Any such Proclamation may be revoked or varied by a subsequent Proclamation
- 3. Every Proclamation issued under this article except where it is a Proclamation revoking a previous Proclamation, cease to operate at the expiration of two months unless before the expiration of that period it has been approved by resolutions of both Houses of Parliament Provided that if any such Proclamation (not being a Proclamation revoking a previous Proclamation) is issued at a time when the House of the People is dissolved or the dissolution of the House of the People takes place during the period of two months referred to in this clause, and if a resolution approving the Proclamation has been passed by the Council of States, but no resolution with respect to such Proclamation has been passed by the House of the People before the expiration of that period, the Proclamation Shall cease to operate at the expiration of thirty days from the date on which the House of the People first sits after its reconstitution unless before the expiration of the said period of thirty days a resolution approving the Proclamation has been also passed by the House of the People
- 4. A Proclamation so approved shall, unless revoked, cease to operate on the expiration of a period of six months from the date of issue of the Proclamation: Provided that if and so often as a resolution approving the continuance in force of such a Proclamation is passed by both Houses of Parliament, the Proclamation shall, unless revoked, continue in force for a further period of six months from the date on which under this clause it would otherwise have ceased to operating, but no such Proclamation shall in any case remain in force for more than three years: Provided further that if the dissolution of the House of the People takes place during any such period of six months and a resolution approving the continuance in force of such Proclamation has been passed by the Council of States, but no resolution with respect to the continuance in force of such Proclamation has been passed by the House of the People during the said period, the Proclamation shall cease to operate at the expiration of thirty days from the date on which the House of the People first sits after its reconstitution unless before the expiration of the said period of thirty days a resolution approving the continuance in force of the Proclamation has been also passed by the House of the People.
- 5. Notwithstanding anything contained in clause (4), a resolution with respect to the continuance in force of a Proclamation approved under clause (3) for any period beyond the expiration of one year from the date of issue of such proclamation shall not be passed by either House of Parliament unless.

- 6. A Proclamation of Emergency is in operation, in the whole of India or, as the case may be, in the whole or any part of the State, at the time of the passing of such resolution, and
- 7. The Election Commission certifies that the continuance in force of the Proclamation approved under clause (3) during the period specified in such resolution is necessary on account of difficulties in holding general elections to the Legislative Assembly of the State concerned: Provided that in the case of the Proclamation issued under clause (1) on the 6 th day of October, 1985 with respect to the State of Punjab, the reference in this clause to any period beyond the expiration of two years.

## Article 124: Establishment and Constitution of Supreme Court

- 1. There shall be a Supreme Court of India consisting of a Chief Justice of India and, until Parliament by law prescribes a larger number, of not more than seven other Judges.
- 2. Every Judge of the Supreme Court shall be appointed by the President by warrant under his hand and seal after consultation with such of the Judges of the Supreme Court and of the High Courts in the States as the President may deem necessary for the purpose and shall hold office until he attains the age of sixty-five years:

Provided that in the case of appointment of a Judge other than the Chief Justice, the Chief Justice of India shall always be consulted:

Provided further that -

- a. a Judge may, by writing under his hand addressed to the President, resign his office;
- b. a Judge may be removed from his office in the manner provided in clause (4).
- c. 1[(2A) The age of a Judge of the Supreme Court shall be determined by such authority and in such manner as Parliament may by law provide.]
- 3. A person shall not be qualified for appointment as a Judge of the Supreme Court unless he is a citizen of India and
  - a. has been for at least five years a Judge of a High Court or of two or more such Courts in succession; or
  - b. has been for at least ten years an advocate of a High Court or of two or more such Courts in succession; or
  - c. is, in the opinion of the President, a distinguished jurist.

**Explanation I:** In this clause "High Court means a High Court which exercises, or which at any time before the commencement of this Constitution exercised, jurisdiction in any part of the territory of India.

**Explanation II:** In computing for the purpose of this clause the period during which a person has been an advocate, any period during which a person has held judicial office not inferior to that of a district judge after he became an advocate shall be included.

4. A Judge of the Supreme Court shall not be removed from his office except by an order of the President passed after an address by each House of Parliament supported by a majority of the total membership of that House and by a majority of not less than twothirds of the members of that House present and voting has been presented to the President in the same session for such removal on the ground of proved misbehaviour or incapacity.

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- 5. Parliament may by law regulate the procedure for the presentation of an address and for the investigation and proof of the misbehaviour or incapacity of a Judge under clause (4).
- 6. Every person appointed to be a Judge of the Supreme Court shall, before he enters upon his office, make and subscribe before the President, or some person appointed in that behalf by him, an oath or affirmation according to the form set out for the purpose in the Third Schedule.
- 7. No person who has held office as a Judge of the Supreme Court shall plead or act in any court or before any authority within the territory of India.

# **SCHEMES IN NEWS**

## SAMPADA (Scheme For Agro-Marine Processing And Development Of Agro-Processing Clusters)

- 1. The Cabinet Committee on Economic Affairs, chaired by the Prime Minister Shri Narendra Modi has given its approval for re-structuring the schemes of the Ministry of Food Processing Industries (MoFPI) under new Central Sector Scheme – SAMPADA (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) for the period 2016-20 coterminous with the 14th Finance Commission cycle.
- <u>Objective</u>:to supplement agriculture, modernize processing and decrease agri-waste.
- 3. SAMPADA is an umbrella scheme incorporating ongoing schemes of the Ministry like Mega Food Parks, Integrated Cold Chain and Value Addition Infrastructure, Food Safety and Quality Assurance Infrastructure, etc. and also new schemes like Infrastructure for Agro-processing Clusters, Creation of Backward and Forward Linkages, Creation / Expansion of Food Processing & Preservation Capacities.
  - a. It includes new schemes of
  - b. Infrastructure for Agro-processing Clusters
  - c. Creation of Backward and Forward Linkages
  - d. Creation / Expansion of Food Processing & Preservation Capacities aim at development of modern infrastructure to encourage entrepreneurs to set up food processing units based on cluster approach, provide effective and seamless backward and forward integration for processed food industry by plugging gaps in supply chain
  - e. Creation of processing and preservation capacities and modernization/ expansion of existing food processing units.
- 4. The implementation of SAMPADA will result in
  - a. Creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet.
  - b. Provides better prices to farmers and is a big step towards doubling of farmers' income.
  - c. Create huge employment opportunities especially in the rural areas.
  - d. Helps in reducing wastage of agricultural produce, increasing the processing level, availability of safe and convenient processed foods at affordable price to consumers and enhancing the export of the processed foods.

## VAJRA (Visiting Advanced Joint Research) Faculty scheme

- <u>Implementing agency</u>: The Science and Engineering Research Board (SERB), a Statutory body Department of Science and Technology.
- Enables NRIs and overseas scientific community to participate and contribute to research and development in India.
- VAJRA faculty will undertake research in S&T priority areas of nation wherein the capability and capacity are needed to be developed. The VAJRA faculty will engage in collaborative research in public funded institutions.
- 4. The residency period of the VAJRA Faculty in India would be for a minimum of 1 month and a maximum of 3 months a year.
- 5. The VAJRA Faculty is provided a lump-sum amount of US\$ 15000 in the first month of residency in a year and US\$ 10000 p.m. in the other two months to cover their travel and honorarium. While no separate support is provided for e.g. accommodation, medical / personal insurance etc. the host institute may consider providing additional support.
- 6. Public funded academic institutions and national laboratories are eligible to host the VAJRA Faculty. These institutions should appoint them as Adjunct / Visiting Faculty and involve them in co-guiding and mentoring of students and developing collaborative programs. The Faculty can also be allowed to participate in other academic activities as agreed to by the host institution and the Faculty.

## **PRACTICE QUESTIONS**

- 1. The development of Chabahar Port is in line with the Tehran Declaration (2001) and the New Delhi Declaration (2003).
- 2. Chabahar Port lies in the Gulf of Oman in Iran and will help in expanding maritime commerce in the region.

Select the correct answer using the code given below:

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

Answer: A

Topic: IR

Type: Factual

Explantion :

India-Iran cooperation in the field of development of infrastructure and regional connectivity including the development of Chabahar Port is in line with the Tehran Declaration (2001) and the New Delhi Declaration (2003).

Chabahar Port lies outside the Persian Gulf in Iran and will help in expanding maritime commerce in the region.

- 2. Conisder the statements :
  - 1. Pay Commission is a constitutional body.
  - 2. Pay Commission will not give recommendations to pay related things to defense personnel.

Select the correct answer using the code given below:

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

Answer: D

Topic: Polity

Type: Factual

#### Explantion :

Pay Commission is set up intermittently by Government of India, and gives its recommendations regarding changes in salary structure of its employees. Since India's Independence, seven pay commissions have been set up on a regular basis to review and make recommendations on the work and pay structure of all civil and military divisions of the Government of India.

- 3. Conisder the statements :
  - 1. The digital fiat currency works in the same way as do notes and coins.
  - 2. Any person in India can hold it, transfer it and use it to settle debts with or without a bank account.

Select the correct answer using the code given below:

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

Answer: C

Topic: Economy

Type: Factual

**Explanation :** The digital fiat currency works in the same way as do notes and coins. By virtue of its digital nature, it has the potential to be the most financially inclusive instrument.

Any person in India can hold it, transfer it and use it to settle debts, be it a farmer living in Gahmar village in U.P. or a salaried individual in Mumbai, with or without a bank account.

- 4. Who is the India's governor to Asian Development Bank?
  - A. Governor of RBI
  - B. Finance Minister
  - C. Secretary to the Finance Ministry
  - D. Commerce and Industry Minister

Answer: B

Topic: Economy

Type: Factual

**Explanation:** Finance Minister is the India's governor to Asian Development Bank.

- 5. Recently Gyan Sangam was in news. What is this about?
  - A. Tax reforms.
  - B. Initiative to bring more innovation in the higher education.
  - C. Banking reforms.
  - D. To do indigenization of defense sector.

Answer: C

Topic: Economy

Type: Factual

BYJU'S

**Explanation:** In 2015, the Prime Minister launched a Gyan Sangam conclave with bankers, and an Indradhanush road map to revitalise public sector banks

- 6. The Pravasi Bharatiya Divas is celebrated every year on January 9th to mark
  - A. The date of return of Mahatma Gandhi from South Africa for good
  - B. The date of departure of Mahatma Gandhi to South Africa from India
  - C. The date when Independent India first received a Non-Resident Indian's remittance
  - D. The date of return of indentured labourers from the Caribbean in 1948 Incorrect

#### Correct Answer: A

Type: G.K

#### Level: Moderate

**Explanation:** The Pravasi Bharatiya Divas is celebrated every year on January 9th to mark the date of return of Mahatma Gandhi from South Africa for good.

- 7. The Agricultural and Processed Food Products Export Development Authority (APEDA) is under the
  - A. Ministry of Consumer Affairs, Food and Public Distribution
  - B. Ministry of Agriculture
  - C. Ministry of Food Processing Industries
  - D. None of the above

#### Correct Answer: A

Type: Current Affairs

Level: moderate

**Explanation:** APEDA is under the Ministry of Commerce and Industry.

- 8. Which among the following contributes the maximum number of troops to the United Nations Peacekeeping Operations?
  - A. India
  - B. North America
  - C. Africa
  - D. Asia Pacific

#### Correct Answer: C

Type: Current Affairs

#### Level: moderate

**Explanation:** Africa contributes the maximum number of troops to the UN peace keeping operations.

- 9. Conisder the statements :
  - India, Bhutan, Nepal and Bangladesh have recently signed a Motor Vehicles Agreement
  - 2. The Treaty of Peace and Friendship of 1950 between India and Nepal is still in force

Select the correct answer using the code given below:

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

## Correct Answer: C

Type: Current Affairs

Level: moderate

#### **Explanation:**

Aug 2014: The two Prime Ministers agreed to review, adjust and update the Treaty of Peace and Friendship of 1950 and other bilateral agreements. Both sides agreed that the revised Treaty should better reflect the current realities and aim to further consolidate and expand the multifaceted and deep rooted relationships in a forward looking manner.

- 10. Among the following who are the Agaria Community?
  - A. A traditional toddy tappers community of Andhra Pradesh
  - B. A traditional fishing community of Maharashtra.
  - C. A traditional silk-weaving community of Karnataka
  - D. A traditional salt-pan workers community of Gujarat.

#### Correct Answer: d

Type: Current Affair

Level: Moderate

**Explanation:** The Agaria are a Muslim community found in the state of Gujarat in India.

- 11. In which State is the Buddhist site Tabo Monastery located?
  - A. Arunachal Pradesh
  - B. Himachal Pradesh
  - C. Sikkim
  - D. Uttrakhand

#### Correct Answer: B

Type: Current Affair

Level: Moderate

**Explanation:** Tabo Monastery is located in the Tago village of Spiti Valley, Himachal Pradesh.

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- 12. In which one of the following States has India's largest private sector sea port has been commissioned recently?
  - A. Andhra Pradesh
  - B. Karnataka
  - C. Kerala
  - D. Tamil Nadu

Correct Answer: A

Type: Current Affair

Level: Moderate

Explanation: Andhra Pradesh

13. An increase in the Bank Rate generally indicates that the

- A. Market rate of interest is likely to fall
- B. Central Bank is no longer making loans to commercial banks
- C. Central Bank is following an easy money policy
- D. Central Bank is following a tight money policy

Correct Answer: D

Type: Economy

Level: Moderate

**Explanation:** A Tight monetary policy is a course of action undertaken by Central Bank to constrict spending in an economy, or to curb inflation when it is rising too fast. The increased bank rate increases the cost of borrowing and effectively reduces its attractiveness.

- 14. If Panchayats is dissolved, elections are to be held within
  - A. 1 month
  - B. 3 months
  - C. 6 months
  - D. 1 year

## Correct Answer: C

Type: Polity

#### Level: Moderate

**Explanation:** Duration of Panchayats is 5 years. Fresh election to constitute a Panchayat shall be completed before the expiry of its term; or in case of dissolution before the expiry of a period of 6months from the date of its dissolution.

- 15. Identify the correct Statement
  - A. The Representation of the People Act bar political parties from receiving foreign funds.
  - B. The Foreign Contribution Regulation Act bar political parties from receiving foreign funds.
  - C. Both A and B
  - D. Neither A nor B

Correct Answer: C

Type: Polity

Level: Easy

**Explanation:** The Representation of the People Act and the FCRA bar political parties from receiving foreign funds.

- 16. Consider the following statement with reference to The National Pharmaceutical Pricing Authority
  - 1. It is a statutory body.
  - 2. It controls the prices of Pharmaceutical drugs in India.

Select the correct answer using the code given below:

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

Correct Answer: B

Type: Current Affair

Level: Moderate

**Explanation:** The National Pharmaceutical Pricing Authority (NPPA) is a government regulatory agency {set up as per executive order and thus not a statutory body} that controls the prices of pharmaceutical drugs in India.

- 17. Consider the following statements
  - 1. In Multidrug Resistan Tuberculosis, patients do not respond to second-line of drugs.
  - Drugs like Bedaquiline and Delamanid are not adequately available in India's national healthcare system.
  - 3. India shoulders the highest TB burden in the world.

Select the correct answer using the code given below:

- A. 1 and 2 only.
- B. 2 and 3 only.
- C. All Correct
- D. 1 and 3 only.

Correct Answer: B

Type: Current Affair

Level: Moderate

**Explanation:** 

- Multidrug Resistant-Tuberculosis (MDR-TB), a version of the disease where patients do not respond to first-line drugs
- Bedaquiline and Delamanid are to be made available in India's national healthcare system.
- Not only does India shoulder the highest TB burden in the world, with over 2 million of the 10 million reported cases, it also accounts for the most drug-resistant

patients — nearly 1.3 lakh people who do not respond to first-line drugs.

#### 18. Consider the following statements

- 1. Railway Development Authority would involve in policy making of Railways.
- 2. Railway Development Authority would involve in setting safety standards for the railways.
- 3. Railway Development Authority would impose tariff on Indian Railways.

Select the correct answer using the code given below:

- A. 1 and 2 only.
- B. 2 and 3 only.
- C. All Correct
- D. None.

#### Correct Answer: D

Type: Current Affair

Level: Moderate

#### Explanation:

- India's first rail regulator, Rail Development Authority
   (RDA) functional areas:
- Look at tariff structures for passenger and freight operations
- Set standards of performance and efficiency enforceable under the Railways Act.
- RDA defined standards of performance and efficiency ,would be notified as rules under the Railway Act to give a binding force upon acceptance
- RDA would be authorised to check for deviations and suggest remedial measures
- The regulator will provide guidance on quantity and quality of service provided to passengers. These may include setting standards including hours of service, frequency of trains, capacity per coach, cleanliness level, and quality of water, food, furnishing and linen.

#### **RDA's non-functional areas:**

- The regulator will, however, not involve itself in policy making of the Indian Railways, operations and maintenance of the rail system, financial management, setting technical standards and compliance of safety standards,.
- Regulator would only make recommendations on tariff and not impose a tariff on the Indian Railways.
- 19. Who is the present Indian member of the International Court Of Justice?
  - A. Dalveer Bhandari
  - B. N.V Ramana
  - C. Amitava Roy

D. Arjan Kumar Sikri.

Correct Answer: A

Type: G.K

#### Level: Easy

**Explanation:** Dalveer Bhandari (born 1 October 1947) is an Indian member of the International Court of Justice and was a judge of the Supreme Court of India.

- 20. Cases in Supreme Court can be filed only through.
  - A. Advocates-on-record.
  - B. Senior advocates
  - C. Lawyers
  - D. None of the above.

#### Correct Answer: A

Type: Polity

Level: Easy

**Explanation:** Cases in SC can be filed only through Advocates-on-record

- 21. The first transgenic food crop allowed for commercial cultivation in Indian fields is.
  - A. Mustard.
  - B. Cotton.
  - C. Brinjal.
  - D. PL-480.

#### Correct answer: A

Topic: Current Affair

Level: Easy

**Explanation:** GM mustard would be the first transgenic food crop to be allowed for commercial cultivation in Indian fields and would be a gateway for several genetically-modified food crops in India.

- 22. Consider the following statement with reference to Dhara Mustard Hybrid (DMH -11):
  - 1. Transgenic mustard crop
  - 2. Cross-pollinating plant.

Select the correct answer using the code given below:

- A. 1 only.
- B. 2 only.
- C. Both 1 and 2.
- D. None.
- Correct answer: A
- Type: Current Affair
- Level: Moderate
- Explanation: Dhara Mustard Hybrid (DMH -11):

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- The transgenic mustard
- Developed by a team of scientists at Delhi University led by former vice chancellor Deepak Pental under a government-funded project. It uses a system of genes from soil bacterium that makes mustard — generally a self pollinating plant.
- 23. The base year for the new series of IIP, WPI data is.
  - A. 2004-04
  - B. 2010-11
  - C. 2011-12
  - D. 2012-13

#### Correct answer: C

Type: Economy

#### Level: Easy

**Explanation:** Base year revised: The base year for the IIP and the WPI will be 2011-12 and not the current 2004-05. The Consumer Price Index (CPI) and the Gross Domestic Product (GDP) and gross value addition also have 2011-12 as the base year.

- 24. India's first bio refinery plant has set up in which of the following state?
  - A. Andhra Pradesh
  - B. Assam
  - C. Tamil Nadu.
  - D. Maharashtra.

## Correct Answer: D

Type: G.K.

#### Level: Easy

**Explanation:** India's first bio-refinery plant has been inaugurated by the Union Minister for Road Transport and Highway Nitin Gadkari at Rahu in Pune district, Maharashtra. The plant will produce ethanol from variety of biomass. The bio-refinery plant is capable of producing one million litre of ethanol per annum by processing a variety of agro-residue like rice and wheat straw, cotton stalk, cane trash, corn cobs with superior product yields. Biofuel is cost-effective and pollution-free.

- 25. Zonal council is
  - A. A Constitutional Body
  - B. A Statutory body
  - C. Constituted by an executive order.
  - D. None of the above

#### Correct answer: B

- Type: Polity
- Level: Easy

**Explanation:** Zonal Councils have been established via the part III of the States Reorganization Act of 1956, they are statutory bodies.

- 26. Interstate council is
  - A. A Constitutional Body
  - B. A Statutory body
  - C. Constituted by an executive order.
  - D. None of the above

#### Correct answer: A

Type: Polity

Level: Easy

**Explanation:** The Inter State Council is an Indian constitutional body set up on the basis of provisions in Article 263 of the Constitution of India

- 27. Consider the following statements :
  - 1. The Union Home Minister is the Chairman of each of Zonal Councils
  - 2. The Chief Ministers of the States included in each zone act as Vice-Chairman of the Zonal Council for that zone by rotation, each holding office for a period of two year at a time.

Select the correct answer using the code given below:

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

Correct answer: A

Type: Polity

Level: Easy

**Explanation:** Chairman - The Union Home Minister is the Chairman of each of these Councils.

Vice Chairman - The Chief Ministers of the States included in each zone act as Vice-Chairman of the Zonal Council for that zone by rotation, each holding office for a period of one year at a time.

- 28. Which Ministry releases WPI?
  - A. Ministry of Commerce and Industry
  - B. Ministry of Statistics and Programme Implementation
  - C. Ministry of Finance.
  - D. None of the above
  - Correct answer: A
  - Type: Economy

Level: easy

**Explanation:** Ministry of Commerce and Industry released WPI data.

- 29. Which among the following has the highest weightage in the Whole sale price index?
  - A. Manufactured products
  - **B.** Primary Articles
  - C. Fuel and power
  - D. Mineral products

#### Correct answer: A

Type: Economy

Level: easy.

- Recently government introduced pneumococcal conjugate vaccine (PCV) under its Universal immunization programme, PCV is against
  - A. Pneumonia and meningitis.
  - B. Pneumonia and polio
  - C. Pneumonia and TB
  - D. None of the above

Correct Answer: A

Type: Current Affair

Level: Moderate

**Explanation:** Pneumonia and meningitis

- 31. "WannaCry" is
  - A. Malware
  - B. Part of Cry NGO.
  - C. Software progamme developed by U.S.
  - D. None of the above

Correct Answer: A

Type: Current Affair

Level: Moderate

Explanation: WannaCry is a malware

- 32. The 2017 India Integrated Transport and Logistics Summit was held in which city?
  - A. Chennai
  - B. Rajkot
  - C. New Delhi
  - D. Pune.

Correct Answer: C

Type: G.K

Level: Easy

Explanation: 2017, IITL summit was held in New Delhi.

- 33. The 2017 multinational military exercise "Eager Lion" has started in which of the following countries?
  - A. Italy
  - B. Kuwait
  - C. Jordan
  - D. Qatar

Correct Answer: C

Type: G.K

Level: Moderate

**Explanation:** The 7th edition of multinational military exercise "Eager Lion" has started in Jordon from May 8, 2017. Approx 7,400 troops from Europe, Asia, Africa and the Arab Gulf region are taking part in the exercises which run to May 18th, including from United States, Britain, Japan, Kenya, Pakistan, Kuwait, Bahrain, Qatar and Saudi Arabia. The man oeuvres would include border security, cyber defence, and "command and control" exercises, to bolster coordination in response to threats including terrorism. Jordan is a key recipient of US financial aid and a partner in the US-led coalition battling Islamic State group jihadists in Syria and Iraq.

- 34. International Court of Justice, recently in news, located at which of the following place?
  - A. New York
  - B. Brussels
  - C. The Hague
  - D. Paris

#### Correct Answer : C

Topic: International Institution.

Level: Medium.

**Explanation:** The International Court of Justice (commonly referred to as the World Court, ICJ or The Hague) is the primary judicial branch of the United Nations (UN). Seated in the Peace Palace in The Hague, Netherlands, the court settles legal disputes submitted to it by states and provides advisory opinions on legal questions submitted to it by duly authorized international branches, agencies, and the UN General Assembly.

- 35. The Genetic Engineering Appraisal Committee (GEAC) is the apex body constituted in the Ministry of Environment and Forests under which of the following act ?
  - A. Wildlife Protction Act, 1972
  - B. Environment Protection Act, 1986
  - C. Biological Diversity Act, 2002
  - D. Forest Rights Act, 2006

#### Correct Answer: B

Topic : Environment

## Level : Medium

#### **Explanation:**

The Genetic Engineering Appraisal Committee (GEAC) is the apex body constituted in the Ministry of Environment and Forests under 'Rules for Manufacture, Use, Import, Export and Storage of Hazardous Microorganisms/ Genetically Engineered Organisms or Cells 1989', under the Environment Protection Act, 1986.

- 36. Consider the statements
  - 1. The Election Commission of India is an autonomous constitutional authority responsible for administering election processes in India.
  - 2. The body administers elections to the Lok Sabha, Rajya Sabha, state legislatures only.

Select the correct answer using the code given below:

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

#### Correct Answer: A

Topic : Constitutional Bodies

#### Level: Medium

#### Explanation:

The Election Commission of India is an autonomous constitutional authority responsible for administering election processes in India. The body administers elections to the Lok Sabha, Rajya Sabha, state legislatures, and the offices of the President and Vice President in the country.

#### 37. Consider the statements

- 1. The Chief Justice of India (based on a recommendation from incumbent Govt of India) appoints the Chief Election Commissioner.
- 2. Chief Election Commissioner has tenure of five years, or up to the age of 65 years, whichever is earlier.

Select the correct answer using the code given below

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

#### Answer : D

Topic : Constitutional Bodies

Level : Medium

#### **Explanation:**

The President of India (based on a recommendation from incumbent Govt of India) appoints the Chief Election Commissioner. Conventionally, senior-most Election

- 38. Consider the statements
  - 1. GM mustard (DMH-11) is developed by Mahyco and the Tamil Nadu Agricultural University.
  - 2. Bt brinjal is developed by a team of scientists at Delhi University led by former vice-chancellor Deepak Pental under a government-funded project.

Select the correct answer using the code given below

- A. 1 only.
- B. 2 only.
- C. Both 1 and 2.
- D. None.
- Correct Answer: D

Topic : Biotechnology

Level: Medium

**Explanation:** Bt brinjal is developed by Mahyco and the Tamil Nadu Agricultural University, for commercial release.

On the other hand, GM mustard (DMH-11) was developed by a team of scientists at Delhi University led by former vicechancellor Deepak Pental under a government-funded project.

- 39. The average annual temperature of a meteorological station is 26 degree Celsius, its average rainfall is 63 cm and its average annual temperature is 9 degree Celsius. The station in question is
  - A. Allahabad
  - B. Cherrapunji
  - C. Chennai
  - D. Kolkata.

Correct Answer: C

Type: Geography

Level: Moderate

**Explanation:** Climatic conditions of Chennai is Tropical Savanna type where the average annual temperature is 26 degree Celsius, its average rainfall is 63 cm and its average annual temperature is 9 degree Celsius.

- 40. Life expectancy is the highest in the world in
  - A. Canada
  - B. Germany
  - C. Japan
  - D. Norway.

## Correct answer: C

- Type: G.K
- Level: Easy

**Explanation:** Japan has the life expectancy of about 83.59 years. Highest in the world.

- 41. Which one of the following is produced during the formation of photochemical smog
  - A. Hydrocarbon
  - B. Nitrogen oxide
  - C. Ozone
  - D. Methane

#### Correct answer: B

Type: Environmetal Science and Ecology

Level: moderate

**Explanation:** During photochemical smog NO and O3 both are produced, but major production is of nitrogen oxide and NO2.

- 42. Epiphytes are plants which depends on other plants for
  - A. Food
  - B. Mechanical Support
  - C. Shade
  - D. Water

#### Correct Answer: B

Type: General Science

Level: Easy

**Explanation:** Epiphytes depends on other plant for mechanical support.

- 43. Ergotism is due to consumption of
  - A. Contaminated grains
  - B. Rotting vegetables
  - C. Contaminated water
  - D. Safe cooked food

#### Correct answer: A

**Type:** General Science

Level: Moderate

**Explanation:** Ergotism is due the effect of long term ergot poisoning, due to ingestion of alkaloids produced by fungus which are found in infected cereals and ryes.

- 44. The Fair and Remunerative Price (FRP) of sugarcane is approved by the
  - A. Cabinet Committee on Economic Affairs
  - B. Commission for Agricultural Costs and Prices.
  - C. Agricultural Produce Market Committee.
  - D. Directorate of Marketing and Inspection, Ministry of Agriculture

Correct Answer: A

Type: Current Affairs.

Level: Moderate.

Explanation: Cabinet Committee on Economic Affairs.

- 45. What is RIO+20 Conference, often mentioned in the news?
  - A. It is the United Nations Conference on Sustainable Development.
  - B. It is a Ministerial Meeting of the World Trade Organization.
  - C. It is a Conference of the Inter-governmental Panel on Climate change.
  - D. It is a Conference of the Member Countries of the Convention on Biological Diversity.

#### Correct Answer: A

Type: Current Affairs.

Level: Moderate.

**Explanation:** United Nations Conference on Environment and Development also known as the Rio summit or the Earth summit. It was a major United Nations Conference held in Rio de Janerio from 3 to 14 June 1992. In 2012, the United Nations Conference on Sustainable Development was also held in Rio and is also commonly called Rio+20 or Rio Earth Summit 2012.

- 46. Recently Southern Bird Wing butterfly was approved as State Butterfly of which State?
  - A. Karnataka
  - B. Madhya Pradesh
  - C. Kerala
  - D. Tamil Nadu

Correct Answer: A

Type: Current Affairs.

Level: Moderate.

**Explanation:** The Southern Bird Wing butterfly approved to become the "State butterfly" of Karnataka- distinctive red and yellow stripes

- 47. How do most insects respire?
  - A. Skin.
  - B. Gills.
  - C. Lungs.
  - D. Tracheal System.
  - Correct Answer: D

Type: General Science.

Level: Easy

**Explanation:** Most insects respire through tracheal system that lies on a network of small tubes that channel O2 directly

to the different part of the body.

- 48. The total share of nuclear power in the country currently stands at
  - A. 3.5%
  - B. 4%
  - C. 5%
  - D. 2.5%

#### Correct answer: A

#### Type: G.K

#### Level: Moderate

**Explanation:** The total share of nuclear power in the country currently stands at a measly 3.5 percent

- 49. Identify the correct statement
  - A. Atmospheric pressure and rain drop size are not at all related.
  - Atmospheric pressure and rain drop size are inversely related.
  - C. Atmospheric pressure and rain drop size are directly related.
  - D. None of the above

#### Correct answer: B

Type: Geography

#### Level: Moderate

#### **Explanation:**

- · Atmospheric pressure and rain drop size
- Researchers showed that very early on, the atmospheric pressure on Mars would have been about 4 bars (the Earth's surface today is 1 bar) and the raindrops at this pressure could not have been bigger than three millimetres across, which would not have penetrated the soil.
- As the atmospheric pressure fell to 1.5 bars, the droplets could grow and fall harder, cutting into the soil.

#### 50. Identify the correct statement

- A. IVG is defined as the generation of eggs and sperm from pluripotent stem cells.
- B. IVG is defined as the generation of eggs and sperm from multipotent stem cells
- C. IVG is defined as the generation of eggs and sperm from totipotent stem cells
- D. None of the above

#### Correct Answer: A

Type: General Science

Level: Difficult

**Explanation:** IVG is defined as the generation of eggs and sperm from pluripotent stem cells derived from adult body tissues, such as skin cells. This may lead to the creation of embryos from these gametes

- 51. The 'Doctrine of Lapse', in Modern Indian history, is associated with
  - A. Lord Wellesley
  - B. Lord William Bentick
  - C. Lord Canning
  - D. Lord Dalhousie

#### Correct Answer: D

Type: History

#### Level: Moderate

**Explanation:** "The New Delhi Municipal Council on Monday passed a proposal to change the name of Dalhousie Road to Dara Shikoh Road, after the eldest son of Mughal emperor Shah Jahan."

Doctrine of lapse, in Indian history, was a formula devised by Lord Dalhousie, governor-general of India (1848–56), to deal with questions of succession to Hindu Indian states. It was a corollary to the doctrine of paramountcy, by which Great Britain, as the ruling power of the Indian subcontinent, claimed the superintendence of the subordinate Indian states and so also the regulation of their succession.

- 52. Coalbed Methane is
  - A. A form of natural gas
  - B. A sweet gas
  - C. Both a and b
  - D. Neither a nor b

#### Correct Answer: C

Type: Current Affair

Level: Moderate

**Explanation:** Sweet Gas is natural gas that contains very little or no hydrogen sulphide (H2S). H2S is undesirable due to its toxicity in addition to being corrosive to all metals used in the equipment for gas processing, handling and transportation.

Coalbed methane, coalbed gas, coal seam gas, or coalmine methane is an unconventional form of natural gas extracted from coal. It is called 'sweet gas' because of its lack of hydrogen sulfide.

According to the Directorate General of Hydrocarbons, "India has the fifth largest proven coal reserves in the world and thus holds significant prospects for exploration and exploitation of CBM." 53. Mixed Cropping is the practice of

- A. Growing two or more crops simultaneously on the same piece of land.
- B. Growing crops and rearing livestock simultaneously
- C. Growing different crops on a piece of land in a preplanned succession
- D. Growing fodder crops along with livestock.

#### Correct Answer: A

Type: Environmental Studies and Ecology

Level: Moderate

**Explanation:** In agriculture, multiple cropping is the practice of growing two or more crops in the same piece of land during a single growing season

- 54. Indira Gandhi Prize for Peace, Disarmament and Development for the year 2014 was awarded to
  - A. NTPCL
  - B. ISRO
  - C. BHEL
  - D. BEL

#### Correct Answer: B

Type: G.K

Level: Easy

Explanation: ISRO gets Indira Gandhi Prize for 2014.

- 55. Sonic boom is a phenomenon related with
  - A. Ultrasonic sounds produced by small vertebrates.
  - B. Supersonic sounds produced by moving objects.
  - C. Destruction of sea bed due to SONAR waves.
  - D. None of the above.

#### Correct Answer: B

Type: Science

Level: Easy

**Explanation:** A sonic boom is the sound associated with the shock waves created by an object traveling through the air faster than the speed of sound.

- 56. Which of the following are plant macro-nutrient?
  - 1. Iron
  - 2. Copper
  - 3. Chlorine
  - 4. Nitrogen

Choose the correct answer

- A. 1 and 2 only
- B. 2,3 and 4 only
- C. 1 and 4 only

D. 4 only

#### Correct answer: D

Type: Science

Level: moderate

**Explanation:** The macronutrients: nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), sulfur (S), magnesium (Mg)

- 57. Recently government announced Industry-Academia Collaborative Mission, the main focus area of this mission is
  - A. Accelerate discovery research to early development for biopharmaceuticals
  - B. Accelerate discovery research to early development for GM food crops.
  - C. Accelerate discovery research to early development for biopesticides.
  - D. None of the above.

Correct Answer: A

Type: Current Affair

Level: moderate

#### **Explanation:**

Industry-Academia Collaborative Mission. Aims to accelerate discovery research to early development for biopharmaceuticals

- 58. A Stem cell is having a property to make cells from all three basic body layers, so they can potentially produce any cell or tissue the body needs to repair itself. Which Stem cell is having this property?
  - A. Pluripotent stem cell
  - B. Multipotent Stem cell
  - C. Totipotent stem cell
  - D. None of the above

#### Correct Answer: A

Type: General Science

#### Level: moderate

**Explanation**: They're able to make cells from all three basic body layers, so they can potentially produce any cell or tissue the body needs to repair itself. This "master" property is called pluripotency.

- 59. Global Burden of Disease report is published by
  - A. U.N.H.R.C
  - B. U.N.D.P
  - C. W.H.O
  - D. None of the above.
  - Correct Answer: D
  - Type: Current Affair
  - Level: Moderate

#### **Explanation:**

GBD is based out of the Institute for Health Metrics and Evaluation (IHME) at the University of Washington and funded by the Bill and Melinda Gates Foundation

- 60. Consider the following statement regarding National Investment Infrastructure Fund(NIIF)
  - A. It is a company registered under Companies Act 2013
  - B. It is a trust registered under Indian Trust Act 1882
  - C. It is a cooperative established under Multi-State Cooperative Society Act 2002
  - D. None of the above

#### Correct Answer: B

Type: Current Affair

Level: moderate

**Explanation:** NIIF is a trust registered under Indian Trust Act 1882.

- 61. Indian manufacturers have supplied EVMs
  - A. Sri Lanka
  - B. Myanmar
  - C. Bangladesh
  - D. Bhutan

#### Correct answer: D

Type: Current affairs

Level: moderate

**Explanation:** Indian manufacturers have supplied EVMs to Namibia, Nepal and Bhutan.

- 62. Electronic Voting Machine is manufactured in India by
  - A. BEL only
  - B. Electronics Corporation of India only.
  - C. Both BEL and Electronic Corporation of India
  - D. None of the above

#### Correct answer: C

Type: Current Affair

Level: Easy

**Explanation:** EVM is manufactured by two public sector undertakings, Bharat Electronic Limited and Electronics Corporation of India.

#### 63. Consider the statements

- 1. Global Platform for Disaster Risk Reduction summit is being held at Mexico.
- 2. Global Platform for Disaster Risk Reduction is global forum for reviewing of progress in the implementation of the Sendai Framework for Disaster Risk Reduction

Select the correct answer using the code given below

- A. 1 only.
- B. 2 only.
- C. Both 1 and 2.
- D. None.
- Correct option: C
- Type: Current Affair

Level: Moderate

#### **Explanation:**

- India taking part in global disaster risk reduction meet in Mexico
- The GPDRR is a global forum for strategic advice, coordination, partnership development and review of progress in the implementation of the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030 which was adopted at the 3rd UN World conference on disaster risk reduction held in March 2015 in Sendai, Japan.
- 64. The defence acquisition council is headed by
  - A. National Security Adviser
  - B. Prime Minister
  - C. President of India
  - D. Defence Minister

#### Correct Answer: D

Type: Current Affair

#### Level: Moderate

**Explanation:** The Government has set up a Defence Acquisition Council headed by the Raksha Mantri (Defense minister) for decision making in regard to the totality of the new planning process.

- 65. The defence acquisition council is headed by
  - 1. Ceres
  - 2. Pluto
  - 3. Makemake
  - 4. Eris
  - 5. Haumea

Choose the correct answer

- A. 1, 3, 4, 5
- B. 1, 2, 3, 4
- C. 1, 4, 5
- D. All are correct

#### Correct answer: D

Type: G.K

Level: Easy

**Explanation:** The International Astronomical Union (IAU) currently recognizes five dwarf planets: Ceres; Pluto;

Haumea; Makemake; and Eris.

- 66. What is the target of solar rooftop energy from renewable electicity target set by MNRE by 2022 ?
  - A. GW.
  - B. 20 GW.
  - C. 40 GW.
  - D. 100 GW.

Answer: C

Topic: Renewable energy

Type: Factual

Level : Medium.

**Explanation**: MNRE renewable electricity targets have been upscaled to grow from just under 43 GW in April 2016 to 175 GW by the year 2022, including 100 GW from solar power, 60 GW from wind power, 10 GW from bio power and 5 GW from small hydro power.

The 100 GW has been split into 40 GW and 60 GW for solar rooftop panels and grid connected solar power plants(Solar PV and solar thermal).

- 67. Defence Acquisition Council is headed by which of the following minister?
  - A. Prime Minister.
  - B. Home Minister.
  - C. Defense Minister.
  - D. Finance Minister.

Answer: C

Topic : Polity

Type: Factual

Level : Medium

**Explanation**: The Defence Acquisition Council recently discussed the much-awaited 'strategic partnership model' under which select private firms would manufacture fighter jets, helicopters and submarines in India in partnership with foreign companies.

- 68. With reference to African Development Bank Group (AfDB), consider the statements.
  - The AfDB promotes the investment of public capital onlyl in projects and programs that are likely to contribute to the economic and social development of the region.
  - 2. It comprises of three entities : The African Development Bank, the African Development Fund and the Nigeria Trust Fund.

Which of the above statements is/are correct?

- A. 1 only.
- B. 2 only.
- C. Both 1 and 2.

D. None.

Answer: B

Topic: IR

Type: Factual

Level: Medium

**Explanation**: The African Development Bank Group (AfDB) or Banque Africaine de Developpment (BAD) is a multilateral development finance institution established by Laston M. to contribute to the economic development and social progress of African countries. The AfDB was founded in 1964 and comprises three entities: The African Development Bank, the African Development Fund and the Nigeria Trust Fund. The AfDB's mission is to fight poverty and improve living conditions on the continent through promoting the investment of public and private capital in projects and programs that are likely to contribute to the economic and social development of the region. The AfDB is a financial provider to African governments and private companies investing in the regional member countries (RMC).

- 69. Consider the statements :
  - 1. International Solar Alliance includes all the members of United Nations.
  - 2. It was launched during Paris summit.

Which of the above statements is/are correct?

- A. 1 only.
- B. 2 only.
- C. Both 1 and 2.
- D. None.
- Answer: C
- Topic : Environment

Type: Factual

Level : Medium

**Explanation**: On the first day of the COP-21 summit, the International Solar Alliance was launched by Indian Prime Minister Narendra Modi and French President Francois Hollande as a union of countries with abundant sunlight. Under this alliance, 121 countries that fall within the tropics {i.e. between Tropic of Cancer and Tropic of Capricorn} have been invited to make collaborative efforts to harness solar energy to generate the electricity. Most of these countries fall within Asia, Africa and South America.There are three objectives behind the International Solar Alliance. First is to force down prices by driving demand; second is to bring standardization in solar technologies and third is to foster research and development.

- 70. Consider the statements :
  - 1. Urjit Patel panel report has recommended for setting up of monetary policy committee.

2. Monetary Policy Committee is an executive body of 6 members of which, three members are from RBI while three other members are nominated by the Central Government

Which of the above statements is/are correct?

- A. 1 only.
- B. 2 only.
- C. Both 1 and 2.
- D. None
- Answer: C

Topic: Economy

Type: Factual

Level : Medium

#### Explanation:

Recommendations for MPC Strong recommendations to set monetary policy committee in India had come from Urjit Patel panel report.

Setting up of MPC The Monetary Policy Committee was set up in 2015 after amending the RBI Act. Before that, Government and RBI made an agreement via which Government tasked RBI with the responsibility for price stability and inflation targeting. In context, a Monetary Policy Framework Agreement was signed on February 20, 2015.

Composition of MPC Monetary Policy Committee is an executive body of 6 members. Of these, three members are from RBI while three other members are nominated by the Central Government. Each member has one vote. In case of a tie, the RBI governor has casting vote to break the tie. MPC is required to meet for two days before deciding on rates. Further, it is needed to meet at least four times a year and make public its decisions following each meeting.

- 71. The science concerned with vegetable culture is called as....
  - A. Floriculture
  - B. Olericulture
  - C. Horticulture
  - D. Agriculture

Correct Answer: B

Type: G.K

Level: Moderate

**Explanation:** Olericulture is the production of plants for use of the edible parts

- 72. Yellow revolution is concerned with
  - A. Leather and cocoa
  - B. Oil production
  - C. Petroleum production
  - D. Fertilizers

#### Correct Answer: B

#### Type: G.K

Level: moderate

List of Major Indian Revolutions in Various Sectors

Revolution	Product
Black Revolution	Petroleum Production
Blue Revolution	Fish Production
Brown Revolution	Leather, Cocoa
Golden Fibre Revolution	Jute Production
Golden Revolution	Overall Horticulture, Honey,
	Fruit Production
Green Revolution	Agriculture Production
Grey Revolution	Fertilizers
Pink Revolution	Onions, Prawn
Red Revolution	Meat, Tomato Production
Round Revolution	Potato Production
Silver Fibre Revolution	Cotton Production
Silver Revolution	Egg Production
White Revolution	Dairy, Milk Production
Yellow Revolution	Oil Seed Production
Round Revolution	Potato

73. Consider the statements :

- 1. Dragon's Breath is the world's hottest chilli pepper.
- 2. Oil from the chilli can be used as an anaesthetic

Which of the above statements is/are correct?

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

#### Correct Answer: C

Type: G.K

Level: moderate

**Explanation:** The world's hottest chilli pepper, grown by Welsh farmer Mike Smith, has been named Dragon's Breath. Researchers say the oil from the chilli is so potent that it could act as an alternative anaesthetic for those allergic to conventional drugs. The peppers measure 2.48 million on the Scoville heat scale.

- 74. The science concerned with vegetable culture is called as....
  - A. Methane hydrate
  - B. Methyl hydrate
  - C. Methyl hydride
  - D. Methane hydride

Correct answer: A

Type: Science

Level: moderate

**Explanation:** Combustible ice is a frozen mixture of water and concentrated natural gas

Technically known as methane hydrate, it can be lit on fire



in its frozen state

It is believed to comprise one of the world's most abundant fossil fuels.

- 75. VAJRA (Visiting Advanced Joint Research) Faculty scheme is being implemented by which agency?
  - A. The Science and Engineering Research Board (SERB)
  - B. Council of Scientific & Industrial Research
  - C. Indian Institute of Science
  - D. None of the above

#### Correct answer: A

Type: Schemes

#### Level: moderate

**Explanation:** VAJRA (Visiting Advanced Joint Research) Faculty scheme

Implementing agency: The Science and Engineering Research Board (SERB), a Statutory body Department of Science and Technology.

- Deen Dayal Upadhyaya Grameen Kaushalya Yojana is implemented by
  - A. Ministry of Housing and Urban Poverty Alleviation.
  - B. Ministry of Rural Development
  - C. Ministry of Panchayath Raj Insitution
  - D. None of the above

#### Correct Answer: B

Type: Schemes

#### Level: Moderate

**Explanation:** Deen Dayal Upadhyaya Grameen Kaushalya Yojana will be implemented by the Ministry of Rural Development.

- 77. 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.

- 78. The 2017 bilateral maritime exercise "SIMBEX-17" has started between India and which country?
  - A. Sri Lanka
  - B. South Africa

- C. South Korea
- D. Singapore
- Correct Answer: D Type: Current Affair

### Level: moderate

**Explanation:** The 24th edition of bilateral maritime exercise "SIMBEX-17" has started between Navies of the Republic of Singapore and India in the South China Sea from May 18 and will continue to May 21, 2017. The purpose of the exercise is to increase interoperability between the two navies as well as to develop common understanding and procedures for maritime security operations. SIMBEX is an acronym for "Singapore-India Maritime Bilateral Exercises".

- 79. Which city to host the 2017 annual convention of the African Development Bank (AfDB) Group?
  - A. Valencia
  - B. Gandhinagar
  - C. Lisbon
  - D. Shanghai

#### Correct Answer: B

Type: Curent Affair

Level: Easy

**Explanation:** The 52nd annual meeting of African Development Bank (AfDB) Group will be held at the Mahatma Mandir convention centre in Gandhinagar , Gujarat from May 22 to 26, 2017 with theme "Transforming Agriculture for Wealth Creation in Africa".

- 80. The Bhindawas Bird Sanctuary (BBS) is located in which state?
  - A. Haryana
  - B. Rajasthan
  - C. Sikkim
  - D. Kerala
  - Correct Answer: A

Type: G.K

Level: Moderate

**Explanation:** The Bhindawas Bird Sanctuary (BBS) is located in Jhajjar district, Haryana. It is home to many birds such as Blue Peafowl, Gray Francolin, Black Francolin, Shikra, Black Kite, Greater Coucal, White-throated Kingfisher, Coppersmith Barbet and Indian Roller. It is in news because the sanctuary will soon be developed as a beautiful tourist resort and the additional facilities to be provided to the tourists coming to this place would include arrangements for camping for night stay, beautification of the lake, and opening of dispensary for birds and the wild life.

- 81. What is the style of script in the Indus Valley Civilization?
  - A. Boustrophedon
  - B. Pictographic
  - C. Hieroglyphic
  - D. None of the above

#### Correct Answer: A

Type: Culture

#### Difficulty level: Moderate

**Explanation:** In the Indus Valley, The script was boustrophedon. The script was written from right to left in one line and then from left to right in the next line.

- 82. Consider the following statement with reference to The Surrogacy (Regulation)Bill which was in news recently
  - 1. The bill allows altruistic surrogacy.
  - 2. Surrogate mother need not be a relative
  - 3. Insurance coverage for the surrogate mother is a must

Which of the above statements is/are correct?

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

#### Correct answer: A

Topic: Current affair

#### Level: Easy

#### **Explanation:**

The Surrogacy (Regulation) Bill, 2016 {focus on broad aspects }

- <u>Regulation of surrogacy</u>: The Bill prohibits commercial surrogacy, but allows altruistic surrogacy. Altruistic surrogate involves no monetary compensation to the surrogate mother other than the medical expenses and insurance coverage during the pregnancy. Commercial surrogacy includes surrogacy or its related procedures undertaken for a monetary benefit or reward (in cash or kind) exceeding the basic medical expenses and insurance coverage.
- Purposes for which surrogacy is permitted: Surrogacy is permitted when it is, (i) for intending couples who suffer from proven infertility; and (ii) altruistic; and (iii) not for commercial purposes; and (iv) not for producing children for sale, prostitution or other forms of exploitation.
- Eligibility criteria for intending couple: The intending couple should have a 'certificate of essentiality' and a 'certificate of eligibility' issued by the appropriate authority.

- A certificate of essentiality will be issued upon fulfilment of the following conditions: (i) a certificate of proven infertility of one or both members of the intending couple from a District Medical Board; (ii) an order of parentage and custody of the surrogate child passed by a Magistrate's court; and (iii) insurance coverage for the surrogate mother.
- The certificate of eligibility is issued upon fulfilment of the following conditions by the intending couple: (i) Indian citizens and are married for at least five years; (ii) between 23 to 50 years old female and 26 to 55 years old male; (iii) they do not have any surviving child (biological, adopted or surrogate); this would not include a child who is mentally or physically challenged or suffers from life threatening disorder or fatal illness.
- Eligibility criteria for surrogate mother: To obtain a certificate of eligibility from the appropriate authority, the surrogate mother has to: (i) be a close relative of the intending couple; (ii) be an ever married woman having a child of her own; (iii) be 25 to 35 years old; (iv) be a surrogate only once in her lifetime; and (iv) possess a certificate of medical and psychological fitness for surrogacy.
- <u>Appropriate authority</u>: The central and state governments shall appoint one or more appropriate authorities within 90 days of the Bill becoming an Act. The functions of the appropriate authority include; (i) granting, suspending or cancelling registration of surrogacy clinics; (ii) enforcing standards for surrogacy clinics; (iii) investigating and taking action against breach of the provisions of the Bill; (iv) recommending modifications to the rules and regulations.
- <u>Registration of surrogacy clinics</u>: Surrogacy clinics cannot undertake surrogacy related procedures unless they are registered by the appropriate authority
- National and State Surrogacy Boards: The central and the state governments shall constitute the National Surrogacy Board (NSB) and the State Surrogacy Boards (SSB), respectively. Functions of the NSB include, (i) advising the central government on policy matters relating to surrogacy; (ii) laying down the code of conduct of surrogacy clinics; and (iii) supervising the functioning of SSBs.
- Offences and penalties: The Bill states the following offences: (i) undertaking or advertising commercial surrogacy; (ii) exploiting the surrogate mother; (iii) abandoning, exploiting or disowning a surrogate child; and (iv) selling or importing human embryo or gametes for surrogacy. These offences will attract a minimum penalty of 10 years and a fine up to 10 lakh rupees.

- 83. As per FDI Report 2017, which sector received the highest capital investments?
  - A. Real Estate
  - B. Coal, Oil, Natural gas
  - C. Renewable energy
  - D. Metals.

#### Correct answer: A

Type: Current Affair

#### Level: moderate

**Explanation:** fDi Report 2017 compiled by FDI intelligence, division of Financial Times Ltd.

- India retained its number one position as the world's top most Greenfield FDI investment destination for the second consecutive year, attracting USD 62.3 billion in 2016, says a report.
- India has remained ahead of China and the US as far as FDI inflows.
- In the year 2016, FDI gravitated to locations experiencing the strongest economic growth, while locations in recession or facing high levels of uncertainty saw major decline.
- China has overtaken the US to become the second biggest country for FDI by capital investment, recording USD 59 billion of announced FDI, compared with USD 48 billion-worth in the US.
- Globally, the real estate sector has claimed the top spot for capital investment.
- 84. As per FDI Report 2017, India retained its number one position as the world's top most \_\_\_\_\_\_ investment destination for the second consecutive year?
  - A. Green field
  - B. Brown filed
  - C. Renewable energy.
  - D. Automobile

Correct answer: A

Type: Current Affair

Level: moderate

**Explanation:** India retained its number one position as the world's top most Greenfield FDI investment destination for the second consecutive year, attracting USD 62.3 billion in 2016, says a report.

- 85. The National Pharmaceutical Pricing Authority is a
  - A. Statutory body
  - B. Constitutional body
  - C. Body set up as per executive order
  - D. None of the above

#### Correct Answer: C

Type: Current Affair

Level: Easy

**Explanation:** The National Pharmaceutical Pricing Authority (NPPA) is a government regulatory agency {set up as per executive order and thus not a statutory body} that controls the prices of pharmaceutical drugs in India.

- 86. The Convention on International Transport of Goods cover custom transit by
  - A. Road only
  - B. Rail only
  - C. Inland Water ways only
  - D. None of the above

#### Correct Answer: D

Type: Current Affair

Level: Difficult

#### **Explanation:**

- The TIR Convention establishes an international customs transit system with maximum facility to move goods:
- In sealed vehicles or containers;
- \* From a customs office of departure in one country to a customs office of destination in another country;
- \* Without requiring extensive and time-consuming border checks at intermediate borders;
- \* While, at the same time, providing customs authorities with the required security and guarantees.
- The TIR system not only covers customs transit by road but a combination is possible with other modes of transport (e.g., rail, inland waterway, and even maritime transport), as long as at least one part of the total transport is made by road.
- 87. The "Preservation, protection and improvement of stock and prevention of animal diseases, veterinary training and practice" comes under which list of Constitution of India?
  - A. State list
  - B. Union List
  - C. Concurrent List
  - D. None of the above.

Correct Answer: A

Type: Polity

Level: Easy

**Explanation:** The "Preservation, protection and improvement of stock and prevention of animal diseases, veterinary training and practice" is Entry 15 of the State List of the Seventh Schedule of the Constitution, meaning that State Legislatures have exclusive powers to legislate the

prevention of slaughter and preservation of cattle.

- 88. The State shall endeavour to organise agriculture and animal husbandry on modern and scientific lines and shall, in particular, take steps for preserving and improving the breeds, and prohibiting the slaughter of cows and calves and other milch and draught cattle is mentioned in which part of the constitution?
  - A. Fundamental duties
  - B. Union list
  - C. Concurrent list
  - D. Directive Principles of State Policy

#### Correct Answer: D

#### Type: Polity

#### Level: Easy

**Explanation:** The prohibition of cow slaughter is also one of the Directive Principles of State Policy contained in Article 48 of the Constitution. It reads, "The State shall endeavour to organise agriculture and animal husbandry on modern and scientific lines and shall, in particular, take steps for preserving and improving the breeds, and prohibiting the slaughter of cows and calves and other milch and draught cattle."

- 89. As per NREGA, the minimum number of days within which the workers wages must be paid after due completion of tasks is
  - A. 30 days
  - B. 25 days
  - C. 15 days
  - D. 10days

#### Correct Answer: C

Type: Schemes

#### Level: Moderate

**Explanation:** As per Schedule II of the Act, an NREGA worker must be paid within 15 days of completing his allocated tasks.

- 90. Which bridge is expected to get the tag of the Longest bridge in India in future?
  - A. Bhupen Hazarika Setu
  - B. Dhola-Sadiya Bridge
  - C. The New Ganga Bridge
  - D. Bandra-Worli Sea Link

#### Correct Answer: C

Type: G.K

#### Level: Difficult

#### **Explanation:**

· The Bhupen Hazarika Setu (Dhola-Sadiya Bridge),

which became operational on 26 May 2017, is the longest bridge in India. It spans the Lohit River, a major tributary of Brahmaputra River, from Dhola in south to Sadiya in north to connect the states of Assam and Arunachal Pradesh and is 9.15 kilometres (5.69 mi) in length.

- However, the New Ganga Bridge Project Project with a length of 9.8km being constructed in Bihar for replacing the ageing Mahatma Gandhi Setu and funded by Asian Development Bank is expected to get the tag of Longest bridge in India in future.
- 91. Where is the country's first multi-modal electric vehicle project launched?
  - A. Nagpur
  - B. Mumbai
  - C. Pune
  - D. Bangalore

Correct option: A

Type: Current Affair

#### Level: Easy

**Explanation:** Union transport minister Nitin Gadkari and Maharashtra chief minister Devendra Fadnavis launched the country's first multi-modal electric vehicle project in Nagpur. The pilot project envisages a fleet of 200 electric-powered public transport vehicles which would be run on cab aggregator Ola's app platform in Nagpur.

- 92. Aedes aegypti transmits which among the following
  - A. Dengue, chikungunya, yellow fever and HIV
  - B. Dengue, chikungunya and yellow fever
  - C. Dengue, chikungunya, yellow fever and Zika virus
  - D. Dengue, chikungunya, yellow fever and H1N1

Correct Answer: C

Type: Science

Level: Moderate

#### **Explanation:**

- Zika virus is primarily transmitted to people through the bite of an infected mosquito from the Aedes genus, mainly Aedes aegypti in tropical regions.
- Aedes mosquitoes usually bite during the day, peaking during early morning and late afternoon/evening.
- This is the same mosquito that transmits dengue, chikungunya and yellow fever.
- Sexual transmission of Zika virus is also possible.
- Other modes of transmission such as blood transfusion are being investigated.

#### 93. Consider the following statements.

- 1. Anopheles stephensi transmits Zika virus.
- 2. Currently there is no vaccine for Zika
- 3. Zika has been linked to microcephaly in the new born infants
- Which of the above statements is/are correct ?
- A. 1 only.
- B. 2 only.
- C. Both 2 and 3.
- D. All Three.

#### Correct answer: C

Type: Science

#### Level: moderate

**Explanation:** Anopheles stephensi is a primary mosquito vector of malaria in urban India

- 94. What is/are the eligibility criteria's that needs to be fulfilled, in order to be the member of a G7 group?
  - A. A very high net national wealth
  - B. A very high Human Development Index
  - C. Both A and B
  - D. Neither A nor B

#### Correct Answer: C

Type: International Organization

#### Level: moderate

**Explanation:** A very high net national wealth and a very high Human Development Index are the main requirements to be a member of G7 group.

- 95. Comets appear like a small rounded match-head-like halo followed by a long tail, mainly due to which phenomenon?
  - A. Sublimation of icy nucleus.
  - B. Evaporation of icy nucleus.
  - C. Condensation of icy nucleus.
  - D. None of the above.

#### Correct option: A

Type: Science

#### Level: Moderate

#### **Explanation:**

- Solar wind consists of a plasma of electrons and protons flowing away from the sun at hypersonic speeds. Its existence was first inferred indirectly in the 1950s by observing the shapes of comet tails. Only later was its existence confirmed by the Mariner 2 spacecraft.
- Comets, on the other hand, are icy wanderers that travel far into space and make an appearance periodically in

the skies when they pass close to the Sun. Their shape is characteristic — a small rounded match-head-like halo followed by a long tail — and dictated by its interaction with the solar wind. The halo and the tail consist of material that has sublimated from its icy nucleus and has been dragged out by the solar wind.

- 96. Consider the following statements.
  - 1. Hodaigiri is the harvest dance associated with Reang tribes.
  - 2. Jhum cultivation is one of the primary occupations of Reang tribes.
  - 3. Majority of Reang population are literates.

Which of the above statements is/are correct?

A. 1 and 3

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

#### Correct answer: B

#### Type: Current Affairs

Level: moderate

**Explanation:** One of the unique dances of the Reang is the Hodaigiri/Hojagiri, in which a group of women balance themselves on earthen pitchers and manage other props. The performance is associated with the harvest.

- Jhum (shifting) cultivation has been one of the primary agricultural activities of the Reang tribe.
- As per the 2001 census, 66.93% of the Reang population is illiterate.
- The Reang dialect is of Tibetan-Burmese origin and is locally referred to as Kau Bru. Though there is no script for the language, some publications follow the Bengali or Roman script to keep the language alive.
- 97. SHAKTI', a scheme recently approved by the Union Cabinet,
  - A. A rural women-empowerment initiative by inculcating in them a habit of savings and proper utilisation of financial resources
  - B. A special loan scheme aimed at supporting entrepreneurship among urban women by providing certain concessions
  - C. A campaign to convince state governments to devolve 'ownership' of planning and development functions in panchayat samitis and gram panchayats
  - D. A new coal allocation policy for the power sector

Correct option: D

is

Type: Current Affair

Level: Moderate

**Explanation:** The Union Cabinet approved the "introduction of a New, More Transparent Coal Allocation Policy for Power Sector, 2017-SHAKTI (Scheme for Harnessing and Allocating

Koyala (Coal) Transparently in India).

98. In H1N1 virus , what does H and N stands for

- A. Haemagglutinin and Neuraminidase
- B. Haemoglobulin and Neuraminidase
- C. Haemagglutinin and Neuroglutin
- D. None of the above

#### Correct answer: A

Type: Science

#### Level: moderate

**Explanation:** It is an orthomyxovirus that contains the glycoproteins haemagglutinin and neuraminidase. For this reason, they are described as H1N1, H1N2 etc. depending on the type of H or N antigens they express with metabolic synergy. Haemagglutinin causes red blood cells to clump together and binds the virus to the infected cell. Neuraminidase is a type of glycoside hydrolase enzyme which helps to move the virus particles through the infected cell and assist in budding from the host cells.

- 99. The Supreme Court's power to hear Inter-State Water Disputes can be classified under its
  - A. Original Jurisdiction
  - B. Appellate Jurisdiction
  - C. Writ Jurisdiction
  - D. Advisory Jurisdiction

#### Correct Answer: B

#### Type: Polity

Level: moderate

**Explanation:** "This month, in a landmark verdict, the Supreme Court said it had unfettered power to hear an appeal arising from a river water dispute tribunal under Article 136 of the Constitution."

"It has interpreted the ouster clause in the Inter-State Water Disputes Act as one that merely bars the court from entertaining an original complaint or suit on its own (no original jurisdiction), but not its power to hear appeals against a tribunal's decisions."

#### Appeal by Special Leave, Article 136:

- Notwithstanding anything in this Chapter, the Supreme Court may, in its discretion, grant special leave to appeal from any judgment, decree, determination, sentence or order in any cause or matter passed or made by any court or tribunal in the territory of India
- Nothing in clause (1) shall apply to any judgment, determination, sentence or order passed or made by any court or tribunal constituted by or under any law

relating to the Armed Forces.

- 100.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

Which of the above statements is/are correct?

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

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.

101. The Sakewa Festival has recently celebrated in which state?

- A. Jharkhand
- B. Arunachal Pradesh
- C. Sikkim
- D. Manipur
- Correct Answer: C

Type: Current Affair

Level: Moderate

**Explanation:** The Sakewa festival of Rai Community has recently celebrated in Sikkim as a tribute to Mother Nature. The fest is also known as Bhoomi Puja or Chandi Puja or worship of land. This festival is marked with the performing of puja where prayers are offered to the Supreme Power for Peace and Protection and for the well-being of all the living and non-living things of the universe. Apart from this, Buddha Purnima is also celebrated in Sikkim as the

day marked the birth of Gautam Buddha and also the day on which he attained Nirvana under the Mahabodhi tree at Bodh Gaya. The people visited monasteries and listen sermons across the state. Most monks have spent the day reading scriptures before the statue of the Buddha.

102. The Navegaon National Park is located in which state?

- A. Uttar Pradesh
- B. West Bengal
- C. Gujarat
- D. Maharashtra

#### Correct option: C

Type: Current Affair

#### Level: Moderate

**Explanation:** The Navegaon National Park is located in the Gondia district of Maharashtra. It is a popular forest resort in the easternmost part of Maharashtra and was built in the 18th century. It is home to number of fishes, 209 species of birds, 9 species of reptiles and 26 species of mammals which includes Tiger, Panther, Jungle cat, Small India Civet, Palm Civet, Wolf, Jackals, Bisons, Sambars, Nilgais, Chitals, Wild boars, Sloth Bears, and Nathan Lewis.

- 103. Which of the following parts of constitution explicitly mentions that India is a secular state?
  - A. Preamble
  - B. Fundamental Rights
  - C. Directive Principles of state policy
  - D. The Union

#### Correct Answer: A

Type: Polity

Level: Easy

**Explanation:** Preamble of Indian Constitution declares India as SOVEREIGN, SOCIALIST, SECULAR and DEMOCRATIC REPUBLIC. The words Socialist, Secular, and Integrity were not in the original constitution and have been inserted by 42nd amendment act 1976

- 104. With reference to the State Legislative Council in India, which among the following statements is / are correct?
  - 1. The Legislative Council is a continuing House & twothird of the members retire in two years.
  - 2. 2. Members of local bodies elect one-third of the total number of members of the legislative council
  - 3. 3. If a state legislative council is to be created or abolished, a resolution to that effect is to be first passed by the State legislature by a two-third majority.

Choose the correct option from the codes given below

- A. 1 and 2
- B. 2 and 3
- C. 1 and 3
- D. All are correct
- Correct Answer: B

Type: Polity

Level: Easy

**Explanation:** The first statement is factually incorrect. Legislative Council is a continuing House and one-third of the members retire in two years.

- 105.Mushroom rocks or Rock pedestals or Zeugen are one of the most striking manifestations of \_\_?
  - A. Water Erosion
  - B. Wind Erosion
  - C. Gravity Erosion
  - D. River Deposition

Correct Answer: B

Type: Geography

Level: Moderate

- Explanation: Wind Erosion.
- 106.Recently "Gauvansh Chikitsa Mobile Vans" was launched in which state?
  - A. U.P.
  - B. Bihar.
  - C. Madhya Pradesh.
  - D. Tamil Nadu.

#### Correct Answer: A

Type: G.K

Level: Moderate

**Explanation:** "Gauvansh Chikitsa Mobile Vans" In the initial phase, the service will be available in Lucknow, Gorakhpur, Varanasi, Mathura and Allahabad of U.P.

- 107. Deficiency of Vitamin A can lead to
  - A. Poor vision
  - B. Bleeding of gums
  - C. Soft bones
  - D. None of the above.

Correct Answer: A

Type: G.K

Level: Easy

**Explanation:** Vitamin A can lead to poor vision, infections, and skin problems.

#### 108."Oilzapping" is a

- A. New technique used in extraction of oil from wells.
- B. New technique to get rid of oil spills using Chemicals.
- C. New technique to get rid of oil spills using bacteria.
- D. None of the above

#### Correct Answer: C

Type: Environmental science and Ecology

#### Level: Moderate

#### **Explanation:**

- The new technique of using the bacteria to get rid of oil spill has been called "Oil Zapping".
- Oil Zapping is a bio-remediation technique involving the use of 'oil zapping' bacteria. It was recently employed to clean up the Mumbai shoreline affected by the oil spill that occurred in August 2010.
- The Mumbai Oil Spill happened when a merchant vessel M V Khalijia collided with a cargo ship MSC Chitra 10 km off the coast of Mumbai
- The Maharashtra Pollution Control Board used the services of The Energy and Resources Institute (TERI) which has developed the oil zapping bacteria. TERI had developed this technique over a period of seven years. The Oil Zapping project was supported by the Department of Biotechnology (Government of India) and the Ministry of Science and Technology.

#### • How does Oil Zapper Work?

There are five different bacterial strains that are immobilized and mixed with a carrier material such as powdered corncob. This mixture of five bacteria is called Oil Zapper. Oilzapper feeds on hydrocarbon compounds present in crude oil and the hazardous hydrocarbon waste generated by oil refineries, known as Oil Sludge and converts them into harmless CO2 and water. The Oilzapper is neatly packed into sterile polythene bags and sealed aseptically for safe transport. The shelf life of the product is three months at ambient temperature. The technique was used successfully and 130,000 tons of oily sludge/ oil contaminated soil was treated as per the leading news sources.

109. Identify the correct statement with reference to "Fortification of foods"

- A. Fortification of food is a technique of adding key vitamins, minerals and other nutrients to staple foods
- B. Fortification of food techniques main idea is to fight against malnourishment
- C. Both A and B
- D. None of the above.

#### Correct Answer: C

Type: Health Issues

#### Level: Moderate

**Explanation:** Fortification of eatables is aimed at fighting malnutrition.

#### What it means?

Fortification is the addition of key vitamins and minerals, such as iron, iodine, zinc, Vitamin A & D, to staple

food such as rice, milk and salt to improve their nutritional content.

- The nutrients may or may not have been originally present in the food before processing.
- It is simple, proven, cost-effective and complementry strategy in use across the globe.
- The draft Food Saftey and Standards Regulations, 2016, prescribe the standards for fortification of salt, oil, milk and rice.
- 110.Identify the correct statement with reference to the Great Indian Bustard
  - A. It has been classified as critically Endangered species under the IUCN's Red data book
  - B. It has been classified as critically Endangered species under the wildlife Act of 1972.
  - C. Recently Great Indian Breeding center was setup in Kota, Rajasthan
  - D. All are correct

#### Correct Answer: D

Type: Environmental science and Ecology

#### Level: Moderate

**Explanation:** GIBs, listed as critically endangered under the wildlife Act, 1972 and under IUCN's Red data book

Great Indian Bustard breeding centre to be set up in Kota-India's first captive breeding centre for Great Indian Bustards (GIBs) -- Rajasthan's state bird -- will be set up at Sorsan in Kota district, and a hatchery centre at Nokh in Jaisalmer.

- 111. The famous biennial Thakurani Jatra festival was recently held in
  - A. Odisha.
  - B. Telangana.
  - C. Assam.
  - D. Meghalaya.

#### Correct Answer: A

Type: Culture

Level: Moderate

**Explanation:** The famous biennial Thakurani Jatra festival was recently held in Berhampur (Odisha).

#### 112. Consider the following statements

- a. An aerotropolis is a metropolitan subregion where the layout, infrastructure, and economy are centered on an airport.
- b. Recently the Centre decided to build an aerotropolis in Assam

Choose the correct answers

- A. Only a
- B. Only b
- C. Both a and b
- D. Neither a nor b.

#### Correct Answer: C

Type: Current Affairs

#### Level: Moderate

**Explanation:** The Centre is planning to build an aerotropolis in Assam and has sought 2,000 acres from the state for the purpose.

An aerotropolis is a metropolitan subregion where the layout, infrastructure, and economy are centered on an airport which serves as a multimodal "airport city" commercial core.

- 113. Which one of the following industry doesn't fall into the category of core industries identified by IIP?
  - A. Coal.
  - B. Cement.
  - C. Natural Gas.
  - D. Mining.

#### Correct Answer: D

Type: Current Affairs

Level: Moderate

#### **Explanation:**

The Eight Core Industries comprise nearly 38% of the weight of items included in the Index of Industrial Production (IIP). These are Electricity, steel, refinery products, crude oil, coal, cement, natural gas and fertilisers.

114. Consider the following statements

- a. IIP data is compiled by National sample survey office
- b. 2004-05 is the present base year for compiling IIP data.

Choose the correct answers

- A. Only a
- B. Only b
- C. Both a and b
- D. Neither a nor b.

Correct Answer: B

Type: Economy

Level: Moderate

#### **Explanation:**

Currently, the IIP is calculated on base year of 2004-05.

IIP is compiled and published monthly by the Central Statistical Organisation (CSO) six weeks after the reference month ends.

- 115. Probiotics are
  - A. Bacterial products having healing or curative power
  - B. Fungal products having healing or curative power
  - C. Archaea products having curing or healing power
  - D. None of the above.

#### Correct Answer: A

Type: Science

Level: Easy

**Explanation:** The global probiotics (or beneficial bacteria) industry has already started using certain species of bacteria as healing or curative agents. Mother Dairy, Amul, Danone Yakult, and Nestle India are among the leading producers of probiotic functional foods and beverages in India.

- 116.Recently Government of India introduced a new scheme-"SAMPADA". Its primary focuses on which sector?
  - A. Food Processing.
  - B. Mining
  - C. Women Empowerment
  - D. None of the above.

#### Correct Answer: A

Type: Schemes

Level: Easy

**Explanation:** SAMPADA (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters)

**<u>Objective</u>:** to supplement agriculture, modernize processing and decrease agri-waste.

- 117. The main aim of 'Pradhan Mantri Krishi Sinchai Yojana' is
  - A. Providing irrigation facilities for organic farming
  - B. Promoting sprinkler-irrigation among agriculturists in water-scarce and hill regions
  - C. Promoting the utilisation of renewable energy in irrigation-intensive regions
  - D. Providing some means of protective irrigation to all agricultural farms in the country

#### Correct Answer: D

Type: Schemes

Level: Easy

86

**Explanation:** The overreaching vision of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) is to ensure access to some means of protective irrigation to all agricultural farms in the country, to produce 'per drop more crop', thus bringing much desired rural prosperity.

118. The Right to Vote in India is

- A. A constitutional right
- B. A statutory right
- C. Both A and B
- D. Neither A nor B.

#### Correct Answer: C

Type: Polity

Level: Easy

#### **Explanation:**

In India, the right to vote is provided by the Constitution and the Representation of People's Act, 1951, subject to certain disqualifications.

Article 326 of the Constitution guarantees the right to vote to every citizen above the age of 18.

Further, Section 62 of the Representation of Peoples Act (RoPA), 1951 states that every person who is in the electoral roll of that constituency will be entitled to vote.

- 119. Which one of the following city's Heat Action Plan to cope with heatwaves – was the first of its kind to be formulated in South Asia
  - A. Adilabad
  - B. Ahmedabad
  - C. Hyderabad
  - D. Allahabad.

#### Correct Answer: B

Type: Polity

#### Level: Easy

**Explanation:** "Ahmedabad, for instance, drew up a city-level action plan in the wake of its 46.8°C heatwave of 2010 with support from public health institutions. Preparing the health system to identify symptoms of heat stress and providing treatment through urban health centres is one intervention it decided upon. Reviewing school timetables, rescheduling work timings to cooler hours, making water widely available and reserving religious sites and libraries as cooling centres were others."

- 120.Identify the correct statement with reference to UN Additional Convention Against Torture (CAT)
  - A. India has signed the convention but failed to ratify it.
  - B. CAT aims to prevent torture and other acts of cruel, inhuman, or degrading treatment or punishment around the world.
  - C. Both A and B

D. None of the above

Correct Answer: C

Type: Current Affair

Level: moderate

**Explanation:** UN Additional Convention Against Torture (CAT):

- Nearly all 112 countries at the 5-yearly review of India's record called for India to ratify the UN Additional Convention Against Torture (CAT).
- India is one of only nine countries which haven't yet implemented the Torture convention, despite signing on to it in 1997.
- In 2012, India had also given a unilateral pledge to ratify CAT, but has yet to move forward on it, despite a Supreme Court directive in the matter.
- The Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (commonly known as the United Nations Convention against Torture) is an international human rights treaty, under the review of the United Nations that aims to prevent torture and other acts of cruel, inhuman, or degrading treatment or punishment around the world.
- 121.As per Swachh Survekshan-2017, which city has been designated as the cleanest city in India?
  - A. Indore
  - B. Mysore
  - C. Bangalore
  - D. Bhopal

#### Correct Answer: A

Type: Current Affair

Level: moderate

Explanation: 'Swachh Survekshan-2017' report

Indore in Madhya Pradesh is India's cleanest city. Bhopal gets the second position in the cleanliness ranking of 434 cities.

- 122.Identify the criteria's that were used in Swachh Survekshan-2017 to rank the cities based on cleanliness
  - A. Solid Waste Management
  - B. Citizen Feedback
  - C. Independent observation
  - D. All of them above

Correct Answer: D

- Type: Current Affair
- Level: Moderate

**Explanation:** Criteria and weightages for different components of sanitation related aspects used for the Survey are

- Solid Waste Management including Door-to-Door collection, Processing and Disposal, ODF status etc: 45% of total 2,000 marks i.e 900 marks.
- Citizen feedback: 30% i.e 600 of total marks.
- Independent observation : 25% i.e 500 marks.

#### 123. What do you mean by LIDAR?

- A. It is a new IT cloud computing technique.
- B. It is a new semiconductor fabricating technique.
- C. It is a surveying method
- D. None of the above.

#### Correct Answer: C

Type: Science and Technology

#### Level: Moderate

#### **Explanation:**

- Lidar (also called LIDAR, LiDAR, and LADAR) is a surveying method that measures distance to a target by illuminating that target with a pulsed laser light, and measuring the reflected pulses with a sensor.
- Differences in laser return times and wavelengths can then be used to make digital representations of the target.
- The name lidar, sometimes considered an acronym of Light Detection And Ranging.

124. The main aim of 'Pradhan Mantri Krishi Sinchai Yojana' is

- A. Providing irrigation facilities for organic farming.
- B. Promoting sprinkler-irrigation among agriculturists in water-scarce and hill regions.
- C. Promoting the utilisation of renewable energy in irrigation-intensive regions.
- D. Providing some means of protective irrigation to all agricultural farms in the country.

#### Correct Answer: D

Type: Schemes

Level: Easy

#### **Explanation:**

The overreaching vision of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) is to ensure access to some means of protective irrigation to all agricultural farms in the country, to produce 'per drop more crop', thus bringing much desired rural prosperity.

#### 125.Color of the eye is due to

- A. Retina
- B. Cornea
- C. Iris
- D. Lens

Correct answer: C

Type:General Science

#### Level: Easy

**Explanation:** The iris is a thin, circular structure in the eye, responsible for controlling the diameter and size of the pupil and thus the amount of light reaching the retina. Eye color is defined by that of the iris.

- 126. Which of the following nations is/are NOT members of OPEC (Organisation of the Petroleum Exporting Countries)?
  - 1. Ecuador
  - 2. Venezuela
  - 3. Iran
  - 4. Indonesia

Select the correct answer using the code given below:

- A. 1, 2 and 3
- B. 1 and 2 only
- C. 3 only
- D. None of the above.

#### Correct answer: D

Type: International Organisation

Level: Moderate

**Explanation:** OPEC members include, as of July 2016, Algeria, Angola, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

- 127. Mission Raftaar' is
  - A. The Indian Railways' Mission Mode activity to increase speeds of freight train and super-fast mail/ express trains
  - B. A component of the Ministry of Road Transport and Highways' 'Avataran' or seven mission mode activities, under which all national highways will be made pothole-free by 2019
  - C. A complementary programme to the Sagarmala initiative in order to provide efficient road and rail connectivity from ports to the hinterland
  - D. A blueprint for making optimum use of the massive renewable energy generation capacity that will be created by 2022.

#### Correct answer: A

Type: Current Affairs

Level: Moderate

**Explanation:** Mission Raftaar: It targets doubling of average speeds of freights trains and increasing the average speed of superfast mail/express trains by 25 kmph in the next 5 years.

128. Which one of the following countries of South-West Asia does not open out to the Mediterranean Sea?

- A. Syria.
- B. Jordan.
- C. Lebanon.
- D. Israel.

#### Correct answer: B

Type: Map markings

#### Level: Moderate

129. Consider the following statements:

- a. In India, magnetite is the most important industrial iron ore in terms of the quantity used
- b. The iron ore produced in Goa is of lower grade when compared to the other major iron ore producing states

Which of the statements above is/are correct?

- A. a Only
- B. b Only
- C. Both a and b
- D. Neither a nor b

#### Correct Answer: B

Type: Geography

Level: Moderate

#### **Explanation:**

Magnetite is the finest iron ore with a very high content of iron up to 70 per cent. It has excellent magnetic qualities, especially valuable in the electrical industry. Hematite ore is the most important industrial iron ore in terms of the quantity used, but has slightly lower iron content than magnetite (50-60 per cent).

Over 85 per cent of the iron ore produced in Goa is of low-grade. Compared to Goa, over 90 per cent of the ore produced in the other four major states producing iron ore — Chhatisgarh, Odisha, Karnataka and Jharkhand — is of a higher grade with ferrous content of more than 60 per cent.

#### 130. Consider the following statements:

- a. Many auto companies in India already manufacture car engines which support the Bharat Standard (BS)-VI norms.
- b. At present, BS-IV auto fuels are being supplied all over the country

Which of the statements above is/are correct?

- A. a Only
- B. b Only
- C. Both a and b
- D. Neither a nor b

Correct Answer: A

#### Type: Current Affairs

#### Level: Moderate

**Explanation:**"I am confident the automobile industry will support us on this move. We will support them in the difficulties that they face but to control pollution, they also need to support us...Many auto companies already export car engines which support the BS VI norms. Moreover, we have given them time till 2020 to implement it," Mr. Gadkari said.At present, BS-IV auto fuels are being supplied in over 30 cities while the rest of the country has BS-III fuels.

- 131. The first University Commission of independent India, is popularly known as the
  - A. Radhakrishnan Commission.
  - B. Maulana Azad Commission.
  - C. Prasad Commission.
  - D. Zakir Commission.

Correct Answer: A

- Type: Current Affairs
- Level: Moderate

#### Explanation:

In the context of Indian Universities' presence (rather, the lack of it) in top-200 world rankings, this is of relevance:"..The first University Commission of independent India, popularly known as the Radhakrishnan Commission of 1948, pointed out that universities need to have 'world-mindedness and national sentiments'.

- 132. The Rashtriya e-market Services Ltd. (ReMS) is a
  - A. Joint venture created by the Government of India and the National Commodity & Derivatives Exchange Limited (NCDEX) in order to create a national common agricultural market
  - B. Joint venture created by the Ministry of Commerce and Ministry of Agriculture in order to create a national common agricultural market
  - C. Unified Market Platform offering single licensing system for around 50 agricultural markets in Karnataka
  - D. Joint venture created by the Government of Madhya Pradesh and NCDEX Spot Exchange in order to create a unified state agricultural market

#### Correct Answer: C

Type: Geography

#### Level: Moderate

**Explanation:**"In Karnataka, 51 of the 155 main market yards and 354 sub-yards have been integrated into a single licensing system. Rashtriya e-market Servies Ltd. (ReMS), a joint venture created by the State government and NCDEX Spot Exchange, offers automated auction and post auction facilities (weighting, invoicing, market fee collection, accounting), assaying facilities in the markets, facilitate

warehouse-based sale of produce, facilitate commodity funding, price dissemination by leveraging technology. The wider geographical scope afforded by breaking up fragmented markets has enabled private sector investment in marketing infrastructure."



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