

## G.S.PAPER-2

### Topic: Polity

#### 1. HRD Ministry will now help teachers learn

<http://www.thehindu.com/news/national/hrd-ministry-will-now-help-teachers-learn/article18448410.ece>

#### In News:

- Ministry of Human Resource Development-released a strategy document to build a **national teacher platform**.
- Platform help teachers **access an array of resources** that will aid their **classroom preparation** and help **augment professional development**.
- The platform to work as **national teacher education registry**.
- It can be used by teachers to showcase their **resume** to prospective employers. People looking to clear the teacher eligibility test can take courses on the platform.

### Topic: Bilateral Relations

#### 2. India to skip B&R Forum

<http://www.thehindu.com/todays-paper/tp-national/india-to-skip-br-forum/article18449953.ece>

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

#### 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.

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

<http://www.thehindu.com/todays-paper/tp-international/surprised-by-icj-order-pak-mulls-next-move/article18450070.ece>

#### 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.
  - ✓ Appeals still pending : 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.**

#### **Topic: World Affairs**

##### **4. China, Pakistan ink pacts ahead of Belt and Road Forum summit**

<http://www.thehindu.com/news/international/china-to-invest-50-billion-to-develop-indus-river-cascade-report/article18445984.ece>

#### **In news:**

- 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.

#### **Topic: Health Issues**

##### **5. Pneumonia vaccine to be part of immunisation drive**

<http://www.thehindu.com/todays-paper/tp-national/pneumonia-vaccine-to-be-part-of-immunisation-drive/article18449921.ece>

#### **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 vaccine-preventable 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.

## G.S.PAPER-3

### Topic: Environmental Science and Ecology

#### 1. Traffic pollution reaches the Himalayas

<http://www.thehindu.com/sci-tech/science/traffic-pollution-reaches-the-himalayas/article18446915.ece>

#### In news:

- India's notorious traffic pollution is no longer an urban malaise, its impact is now being felt 4,000 metres above sea level, in the Himalayas.
- Geologists have found high levels of sulphur from diesel emissions along the Manali-Leh highway that snakes through the northwestern Himalayas.
- Soil samples from four sites along the 480 km highway were tested for 10 heavy metals and sulphur among other chemicals.
- While the good news is that heavy metal contamination was found to be low, the soil had significantly high levels **of sulphur** (490–2033 ppm), which the scientists attribute to diesel exhaust from heavy traffic on this mountainous road.
- Indian diesel contains some of **the highest concentrations of sulphur** in the world and an estimated 70% of automobiles running on Indian roads use diesel,

### Topic: Science and Technology

#### 2. NASA not taking humans on first flight of new rocket

<http://www.thehindu.com/sci-tech/science/nasa-not-taking-humans-on-first-flight-of-new-rocket/article18447084.ece>

#### In news:

- NASA has dropped the idea of putting astronauts aboard the first integrated flight of the Space Launch System rocket and **Orion spacecraft - Exploration Mission-1 (EM-1)**.
- This is the first in a broad series of exploration missions that plans to take humans to deep space, and eventually to Mars.

#### 3. Can doctors judge best quality in medicines?

<http://www.thehindu.com/sci-tech/health/can-doctors-judge-best-quality-in-medicines/article18447835.ece>

#### Context:

- Prime Minister Narendra Modi announced that his government will soon make it mandatory for doctors to prescribe medicines by generic names.
- The decision was to ensure drug prices remain affordable.
- **Medical Council of India (MCI)** - issued a notice reminding doctors that according to a 2016 amendment to the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002, they are **supposed to prescribe drugs with generic names**.

- **Indian Medical Association (IMA) response**-“ The judgment to choose a rational drug and its format vests only with the Registered Medical Practitioners. This right of the medical profession is sacrosanct.”

**In news:**

- **National Institute of Biologicals for the Central Drugs Standard Control Organisation report**
  - ✓ Conducted a survey on substandard and spurious drugs.
  - ✓ Report established that branded medicines are in no way assurance of quality.
  - ✓ Survey conducted from 2014-2016 and in which 47,954 samples of drugs were collected from across the country and put to test
    - Only 13 samples (0.024%) were spurious
    - 1,850 samples (3.16%) were substandard.
    - It also showed that while in retail outlets 3% of the medicines were substandard, in government pharmacies the figure was a staggering 10%.
    - **26 out of 46 samples (56.52%) from the Maharashtra facility of pharmaceutical giant Pfizer Limited were found to be substandard in the survey.**
    - Cipla Limited from different manufacturing units across India were found to be substandard in the survey.
    - Dr. Reddy’s Laboratories Ltd. had nine substandard samples, while Zydus Healthcare Limited had six.
- Health Ministry has initiated action against defaulting pharmaceutical companies.
- **NEED OF THE HOUR:**
  - ✓ The government, along with the World Health Organization (WHO), must push drug companies to comply with the latter’s good manufacturing practices.
  - ✓ The capacity of the State FDAs [Food and Drug Authorities] to start performing technical evaluation before new manufacturers of older medicines are licensed, and actively identify and remove substandard drugs from the supply chain.
  - ✓ The country needs regular surveys and longitudinal studies to weed out substandard medicines from government as well as retail shops.

## Topic: Cyber Security

### 4. India largely safe from cyberattack

<http://www.thehindu.com/todays-paper/tp-national/india-largely-safe-from-cyberattack/article18449926.ece>

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

**In news:**

- 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.
- **Kaspersky response:** 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).

- **WannaCry**: 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.

## 5. WannaCry spreads tears globally

<http://www.thehindu.com/todays-paper/tp-national/wannacry-spreads-tears-globally/article18449932.ece>

### 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.
- 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**.

## PRACTICE QUESTIONS

1. 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.

2. **“WannaCry”** is
  - A. Malware
  - B. Part of Cry NGO.
  - C. Software programme developed by U.S.
  - D. None of the above

Correct Answer: A

Type: Current Affair

Level: Moderate

Explanation: WannaCry is a malware.

3. 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

4. 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 Jordan 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.



## GS Paper 2

Topic : Polity

1. Be scientific On GM mustard for farms, the Centre must privilege reason over politics in taking the call

<http://www.thehindu.com/opinion/editorial/be-scientific/article18452318.ece>

- 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.

2. 'EVMs cannot be perfectly secure' Professor says using VVPAT can help

<http://www.thehindu.com/todays-paper/tp-national/evms-cannot-be-perfectly-secure/article18453540.ece>

What's in news ?

- The electronic voting machine (EVM) can't be impeccably secure.
- Be that as it may, it is conceivable to hold straightforward races by making its outline open, getting master assessment on its vulnerabilities, tending to them through an open procedure and utilizing VVPAT, with the right convention, for each machine in each race with open reviews, says George Washington University software engineering educator Poorvi L. Vora.
- She said that where VVPAT couldn't be executed effectively and totally, there appeared to be no alternative other than paper tallies.
- Educator Vora is a part of a group of 31 exceptionally qualified researchers and specialists that as of late — through an open letter to Chief Election Commissioner Nasim Zaidi — raised a scope of issues identified with EVM security.

Topic : International Relations

1. The Hague battle for Jadhav today

<http://www.thehindu.com/todays-paper/tp-national/the-hague-battle-for-jadhav-today/article18453546.ece>

Why in news ?

- The Peace Palace, home of the International Court of Justice in The Hague, will on Monday hold public hearings on the case of Kulbhushan Jadhav, the former Indian Naval officer, who was arrested and sentenced to death by Pakistan in April over allegations of espionage and abetting terror.

International Court of Justice

- 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.

2. Xi evokes Panchsheel as India skips meet Sharif underscores need to resolve conflict through talks

<http://www.thehindu.com/news/international/all-countries-should-respect-each-others-sovereignty-xi/article18451019.ece>

What's 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 high-level official delegations, to the BRF.

## GS Paper 3

Topic : Economy

1. Centre may execute proposed social security law in phases

<http://www.thehindu.com/business/Industry/centre-may-execute-proposed-social-security-law-in-phases/article18451763.ece>

What's in news ?

- The Labour Ministry may implement its proposed social security law in a phased manner, exempting small factories employing up to 10 workers, from its ambit initially.

Key Points :

- This was the first occasion when that the Central government had proposed a law for giving all inclusive standardized savings to all specialists which have been one of the key requests of the focal exchange unions.
- Be that as it may, little and medium ventures, which are kept out of standardized savings plots at present, had raised worries over the administration's proposition.
- Giving standardized savings to all specialists will be one of the key subjects of the 47th Indian Labor Conference (ILC) which is probably going to be introduced by Prime Minister Narendra Modi in the not so distant future.

Practice Questions :

1. International Court of Justice, recently in news , located at which of the following place ?

- a) New York
- b) Brussels
- c) The Hague
- d) Paris

Answer : C

Topic : International Institution

Level : Medium

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.

2. 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 Protection Act, 1972
- b) Environment Protection Act, 1986
- c) Biological Diversity Act, 2002
- d) Forest Rights Act, 2006

Answer : B

Topic : Environment

Level : Medium

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.

3. 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.

Which of the above statements is/are correct ?

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

Answer : A

Topic : Constitutional Bodies

Level : Medium

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.

4. 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.

Which of the above statements is/are correct?

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

Answer : D

Topic : Constitutional Bodies

Level : Medium

The President of India (based on a recommendation from incumbent Govt of India) appoints the Chief Election Commissioner. Conventionally, senior-most Election Commissioner is appointed as CEC. He has tenure of six years, or up to the age of 65 years, whichever is earlier.

5. 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.

Which of the above statements is/are correct ?

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

Answer : D

Topic : Biotechnology

Level : Medium

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 vice-chancellor Deepak Pental under a government-funded project.



## G.S.PAPER-1

### Topic: Social Issues

#### 1. Will come out with a law if triple talaq struck down: Centre to SC

<http://www.thehindu.com/news/national/will-come-out-with-a-law-if-triple-talaq-struck-down-ag-to-sc/article18456619.ece>

**Context:** triple talaq and polygamy.

#### 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.

## G.S.PAPER-2

### Topic: Polity

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

<http://www.thehindu.com/news/national/niti-aayog-registration-must-for-trusts-to-get-minority-status/article18451926.ece>

#### 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

### Topic: Bilateral Relations

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

<http://www.thehindu.com/business/Industry/iran-sets-new-terms-for-gas-field-award/article18458843.ece>

#### In news:

- 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.

## Topic: World Affairs

### 3. Malware continues to wreak havoc

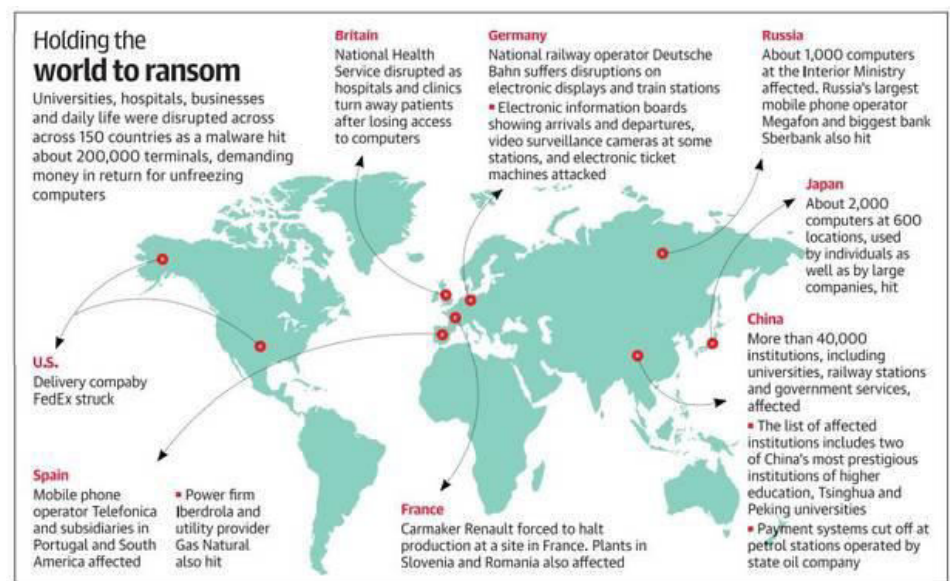
<http://www.thehindu.com/news/international/malware-continues-to-wreak-havoc/article18459458.ece>

#### 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.



### 4. North Korea: new long-range missile can carry heavy nuke

<http://www.thehindu.com/news/international/north-korea-new-long-range-missile-can-carry-heavy-nuke/article18455418.ece>

#### In news:

- North Korea said the missile “Hwasong-12” , it launched over the weekend was a new type of “medium long-range” 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."

### **G.S.Paper-3**

#### **Topic: Economy**

##### **1. Indian scientists unveil home-grown gold standard**

<http://www.thehindu.com/business/indian-scientists-unveil-home-grown-gold-standard/article18447892.ece>

#### **In news:**

- India now has its own standard bar of gold that is 99.99% pure and can be used to verify the purity of gold sold in shops
- Despite India being one of the largest markets for gold, goldsmiths so far depended on imported reference gold bars to check the purity of their biscuits, coins and jewellery

#### **Facts:**

- **Bharatiya Nirdeshak Dravya** (BND 4201), the bar, weighing 20gm and with the dimensions of a 'Parle-G' biscuit (in the words of a scientist associated with its development), will mean that Indian jewellers will no longer need to import gold bars to check the purity of ornaments
- Last November, the India Government Mint (IGM), a unit of Security Printing and Minting Corp of India Ltd, signed an agreement with the Bhabha Atomic Research Centre (BARC) and CSIR-National Physical Laboratory (NPL) to develop the first gold standard

#### **Role of the stakeholders:**

- The NPL is the repository of standard units — such as the kilogram, the second, the centimetre — in India and provides calibration services
- While the bars will be made by the IGM, technical aspects such as measurement would be done by the BARC and certifying the purity of the bars would be the responsibility of the NPL
- The Department produces Standard Gold Bars of standard fineness and purity of 10g, 50g, 100g, 500g & 1000g denominations

#### **Importance to India:**

- Development of this reference material indigenously will add to the Make in India campaign and will save foreign exchange as well as minimise dependency on foreign countries

## **ARTICLE IN NEWS**

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

**Article 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

### **Prelims worthy factual information:**

#### **1. Vienna Convention on Consular Relations**

- The Vienna Convention on Consular Relations of 1963 is an international treaty that defines a framework for consular relations between independent states.
- A consul normally operates out of an embassy in another country, and performs two functions: (1) protecting in the host country the interests of their countrymen, and (2) furthering the commercial and economic relations between the two states.
- While a consul is not a diplomat,[citation needed] they work out of the same premises, and under this treaty they are afforded most of the same privileges, including a variation of diplomatic immunity called consular immunity.
- **Key Provisions:**
  - ✓ **Article 5.** Thirteen functions of a consul are listed, including protecting in the receiving state the interests of the sending state and its nationals, as well as developing the commercial, economic, cultural, and scientific relations between the two states.
  - ✓ **Article 23.** The host nation may at any time and for any reason declare a particular member of the consular staff to be persona non grata. The sending state must recall this person within a reasonable period of time, or otherwise this person may lose their consular immunity.
  - ✓ **Article 31.** The host nation may not enter the consular premises, and must protect the premises from intrusion or damage.
  - ✓ **Article 35.** Freedom of communication between the consul and their home country must be preserved. A consular bag must never be opened. A consular courier must never be detained.
  - ✓ **Article 36.** Foreign nationals who are arrested or detained be given notice "without delay" of their right to have their embassy or consulate notified of that arrest. If the detained foreign national so requests, the police must fax that notice to the embassy or consulate, which can then check up on the person. The notice to the consulate can be as simple as a fax, giving the person's name,

the place of arrest, and, if possible, something about the reason for the arrest or detention.

### **PRACTICE QUESTIONS**

1. 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.

2. 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 83.59years. Highest in the world.

3. 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.

4. 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

5. 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.



## G.S.PAPER-1

### Topic: Social Issues

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

<http://www.thehindu.com/todays-paper/tp-national/triple-talaq-a-matter-of-faith-for-muslims/article18470931.ece>

#### Context:

- Triple talaq and its validity

#### 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.

## G.S.PAPER-2

### Topic: Polity

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

<http://www.thehindu.com/news/national/safeguard-rights-of-online-users-supreme-court/article18469185.ece>

**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?

- **Government response:** 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.

## 2. Indian bags key post in UNFCCC

<http://www.thehindu.com/news/national/indian-bags-key-post-in-unfccc/article18469127.ece>

### 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.

## Topic: Bilateral Relations

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

<http://www.thehindu.com/news/international/india-welcome-to-join-bri-china/article18468657.ece>

### 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.

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

<http://www.thehindu.com/news/national/palestine-israel-must-coexist-modi/article18469200.ece>

**Cotext:** Palestinian President Mahmoud Abbas visit to India.

### 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.
- **Dialogue the way:** 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.

### **G.S.PAPER-3**

#### **Topic: Economy**

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

<http://www.thehindu.com/business/Industry/foreign-food-retailers-can-sell-non-foods-too/article18468324.ece>

##### **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.

##### **2. 'Tough to solve jobs issue'**

<http://www.thehindu.com/todays-paper/tp-business/tough-to-solve-jobs-issue/article18470844.ece>

##### **In news:**

- **Chief Economic Advisor Arvind Subramanian** public lecture at the Nehru Memorial Museum and Library highlights : India's current employment challenge is particularly difficult as sectors that did well in generating jobs in the country's previous economic boom years — information technology (IT), construction and agriculture – are in trouble now
- Economy needs to clock 8% to 10% growth for greater job creation.
- The IT sector is reeling under problem .
- No growth in the employment if economy is growing at the rate of 3-4 %
- India's boom period in the 2000s led to job creation in three sectors that did extremely well, Mr. Subramanian said after a public lecture at the Nehru Memorial Museum and Library.

##### **3. 'National Employment Policy this year'**

<http://www.thehindu.com/business/national-employment-policy-this-year/article18468666.ece>

##### **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.

### Miscellaneous:

#### 1. Southern Bird Wing to be named ‘State butterfly’

<http://www.thehindu.com/todays-paper/tp-national/tp-karnataka/Southern-Bird-Wing-to-be-named-%E2%80%98State-butterfly%E2%80%99/article14616361.ece>

#### 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:**
  - ✓ Karnataka the second State in the country after Maharashtra to adopt a State butterfly.
  - ✓ Maharashtra chose the **Blue Mormon 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 eco-system.
  - ✓ These are important pollinators, and their preservation is necessary for the eco-system

## PRACTICE QUESTIONS

1. 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.
2. 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 Janeiro 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.
3. 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

4. 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 O<sub>2</sub> directly to the different part of the body.

## G.S.PAPER-2

### Topic: Polity

#### 1. Cabinet gives nod to 10 new atomic reactors for power generation

<http://www.firstpost.com/india/indias-nuclear-programme-gets-boost-as-cabinet-approves-setup-of-10-new-atomic-reactor-3452870.html>

#### 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:

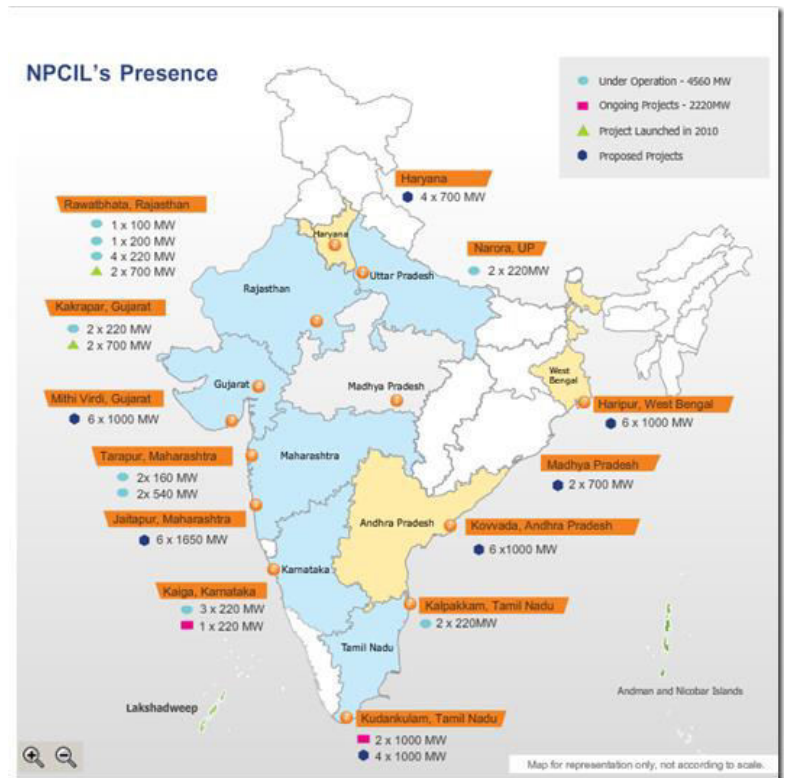
- Prioritise the use of **clean power in India's energy mix** as part of **low-carbon growth** strategy
- Ensure long-term base load requirement for the nation's industrialisation.
- Supports India's commitment to sustainable development, energy self-sufficiency, and bolsters global efforts to combat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

#### 2. NTRO now under Intelligence Act

<http://www.thehindu.com/news/national/ntro-now-under-intelligence-act/article18475771.ece>



**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.

**3. Impose President's rule in A.P., says Katju**

<http://www.thehindu.com/news/national/andhra-pradesh/impose-presidents-rule-in-ap-says-katju/article18475034.ece>

**Context:**

- Social media activist I. Ravi Kiran arrested recently for publishing a cartoon against Chandra Babu Naidu (the CM) and his son.

**In news:**

- Former Supreme Court judge Markandey Katju has requested President Pranab Mukherjee and Prime Minister Narendra Modi through Twitter to impose **President's rule** in Andhra Pradesh by dismissing the Chandrababu Naidu government and dissolving the Legislative Assembly.
- Fresh elections to be ordered under **Article 356** of the Constitution.

**Indigenous gear for Siachen soldiers**



<http://www.thehindu.com/news/national/indigenous-gear-for-siachen-soldiers/article18469169.ece>

**In News:**

- Indian Army is the only force which operates and fights at heights of over 20,000 feet on the Siachen glacier
- But imports basic equipment required to sustain troops there
- Attempt to reverse this: by involving the private sector in addition to the Defence Public Sector Undertakings
- The Army spends about Rs. 500 crore every year on basic personal items for soldiers(for Siachen)
- The items include super high altitude clothing

**What is Super High Altitude?**

- Super high altitude is the height above 18,000 feet
- Defence-Indian Technical Textile Association (ITTA): 3rd joint seminar and exhibition is scheduled to be held on May 22-23 with the theme “Indigenization and provision of improved products to our soldiers.”

**Basic Information:**

- The Indian Technical Textile Association (ITTA) is the only association of the technical textile industry in the country.
- Formation of ITTA was facilitated by office of the textile commissioner, Ministry of Textiles, Govt. of India.
- ITTA membership represents the entire technical textile value chain from raw material to finished goods producers, machinery manufacturers, converters, centers of excellence and R&D institutes. At present ITTA has over 300 members.
- The objective of the ITTA is to promote, support, develop and increase production & export of technical textile to make India a power house of technical textiles in the days to come.

**Topic: Bilateral Relations**

**4. After Palestine, it's Israel's turn**

<http://www.thehindu.com/news/national/after-palestine-its-israels-turn/article18475354.ece>

**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.

▪ **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.

**G.S.PAPER-3**

**Topic: Economy**

**1. UN lowers India GDP growth forecast for 2017 to 7.3%, cautions on bad loans**

<http://www.livemint.com/Politics/1iokpTF9HaCHHMxwzGWOTK/UN-lowers-India-GDP-growth-forecast-for-2017-on-bad-loans-is.html>

**In News:**

- The United Nations (UN) has revised downward India’s GDP growth forecast for 2017 but predicted an increased 7.9% GDP growth next year
- It cautioned that stressed balance sheets in the banking sector due to bad loans will prevent strong investment rebound in the near term.

**Report:**

- The **UN World Economic Situation and Prospects** as of mid- 2017 report, said India is projected to achieve a 7.3% growth in 2017, a downward revision from the 7.7% forecast for the year made when the report was launched in January
- Despite temporary disruptions from the demonetisation policy, economic conditions in India remain robust, underpinned by sound fiscal and monetary policies and the implementation of key domestic reforms, report said
- It noted that current accounts deficits have narrowed “visibly” in India, Brazil and South Africa, and some countries have undergone significant corporate deleveraging, particularly Russia
- The report said world gross product is expected to expand by 2.7% in 2017 and 2.9% in 2018, unchanged from UN forecasts released in January this year
- The report identifies a tentative recovery in world industrial production, along with reviving global trade, driven primarily by rising import demand from East Asia

**Suggested reforms:**

- The report points to a combination of short-term policies to support consumption among the most deprived and longer-term policies such as improving access to healthcare and education and investment in rural infrastructure
- The report states that inflation dynamics in developed economies have reached a turning point, and risks of prolonged deflation have largely dissipated
- By contrast, inflationary pressures have eased in many large emerging markets, allowing interest rates to come down
- Looking ahead, the report advocates for renewed global commitments to deeper international policy coordination in key areas including:
  - ✓ Aligning the multilateral trading system with the 2030 Agenda for Sustainable Development;
  - ✓ Expanding official development aid;
  - ✓ Supporting climate finance and clean technology transfer; and
  - ✓ Addressing the challenges posed by large movements of refugees and migrant

## **2. 'GST to help cut costs of transport, logistics'**

<http://www.thehindu.com/business/Industry/gst-to-help-cut-costs-of-transport-logistics/article18475042.ece>

**Context:** The Goods and Services Tax, begins from July 1st.

**In news:**

**GST advantages as per experts:**

- ✓ Reduce the cost of transport and logistics. The cost of logistics is currently very high in India, making up about 14-15% of GDP whereas it is only 7-8% in mature markets.
- ✓ Formalise the sector, and
- ✓ Could help bring supply chain management to the forefront

**Topic: Science and Technology**

## **3. Rain may have shaped Mars surface**

<http://www.thehindu.com/sci-tech/science/rain-may-have-shaped-mars-surface/article18474665.ece>

**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 run-off 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.

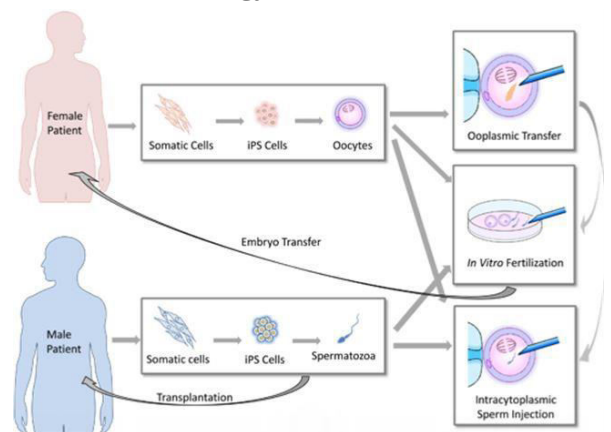
As the atmospheric pressure decreased over millions of years, raindrops got bigger and rainfall became heavy enough to cut into the soil and start to alter the craters. The water could then be channelled and able to cut through the planet's surface, creating valleys.

#### 4. Babies From Skin Cells? Prospect Is Unsettling to Some Experts

<https://www.nytimes.com/2017/05/16/health/ivg-reproductive-technology.html>

##### 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

## **ACTS IN NEWS**

### **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 by Proclamation

(a) 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

(a) 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

(b) 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<sup>th</sup> 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

## **PRACTICE QUESTIONS**

1. 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.

2. Identify the correct statement

- A. Atmospheric pressure and rain drop size are not at all related.
- B. 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.

3. 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

4. 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.

5. 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 (H<sub>2</sub>S). H<sub>2</sub>S 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 coal-mine 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.”



## G.S.PAPER-2

### Topic: Polity

#### 1. Pakistan should not execute Kulbhushan Jadhav till final verdict, rules ICJ

<http://www.thehindu.com/news/international/icj-stays-kulbhushan-jadhavs-execution/article18482698.ece>

#### Context:

The International Court of Justice (ICJ) 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
  - ✓ Argument: 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.

### Topic: Bilateral Relations

#### 2. China invokes Panchsheel

<http://www.thehindu.com/todays-paper/tp-international/china-invokes-panchsheel/article18498497.ece>

#### 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:

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

### G.S.PAPER-3

#### Topic: Economy

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

<http://www.thehindu.com/todays-paper/gst-council-sets-rates-for-most-commodities/article18498641.ece>

#### 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.

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( additional 15% cess)	28%

#### 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



#### Exemption List:

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

## Topic: Environmental Science and Ecology

### 2. Water quality of major rivers in UP not as per norms: CAG

<http://timesofindia.indiatimes.com/city/lucknow/water-quality-of-major-rivers-in-up-not-as-per-norms-cag/articleshow/58737210.cms>

#### In News:

##### ▪ CAG Report:

- ✓ The water quality of major rivers and water bodies in Uttar Pradesh is not as per the norms.
- ✓ Reason: inadequate sewage and industrial effluent treatment facilities in the state. Malfunctioning of existing treatment facilities was also responsible for the poor quality of water.
- ✓ The **BOD (bio-chemical oxygen demand) level** and total **coliform** (which included bacteria that are found in the soil in water that has been influenced by surface water and in human or animal waste) are above the prescribed standard in 12 major rivers and six water bodies for the years 2013-15

#### Basic Information:

##### ▪ Coliform bacteria:

- ✓ **Coliform bacteria** are defined as rod-shaped Gram-negative non-spore forming and motile or non-motile bacteria which can ferment lactose with the production of acid and gas when incubated at 35–37°C.
- ✓ They are a commonly used **indicator of sanitary quality of foods and water**.
- ✓ Coliforms can be found in the aquatic environment, in soil and on vegetation; they are universally present in large numbers in the feces of warm-blooded animals.
- ✓ Whilst coliforms themselves are not normally causes of serious illness, they are easy to culture, and their presence is used to indicate that other pathogenic organisms of fecal origin may be present. Such pathogens include disease-causing bacteria, viruses, or protozoa and many multicellular parasites.

##### ▪ Biochemical oxygen demand

- ✓ **Biochemical oxygen demand** (BOD, also called biological oxygen demand) is the amount of dissolved oxygen needed (i.e., demanded) by aerobic biological organisms to break down organic material present in a given water sample at certain temperature over a specific time period.
- ✓ The BOD value is most commonly expressed in milligrams of oxygen consumed per litre of sample during 5 days of incubation at 20 °C and is often used as a surrogate of the degree of organic pollution of water.

- ✓ BOD can be used as a gauge of the effectiveness of wastewater treatment plants.

## Topic: Science and Technology

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

<http://www.thehindu.com/news/national/other-states/indias-first-uterine-transplant-performed/article18491542.ece>

#### 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.

## Topic: Internal Security and Defense

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


<http://www.thehindu.com/news/national/two-m777-howitzers-arrive-from-us/article18490830.ece>

#### 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.



**Mean machine**  
After three decades, Army's artillery modernisation is on track with the M777

M777 is a 155mm 39 caliber towed artillery gun made of titanium and aluminium

24 km  
Minimum range

30 km  
Maximum range depending on ammunition

▪ Can be rapidly deployed for accurate artillery fire support

▪ Weight: Over 4 tonnes, can be transported by helicopters

**USP:** It is the only battle-proven 155mm Ultra-Light Howitzers (ULH) in the world

▪ There are more than 1,090 M777s in service worldwide

▪ U.S., Canada and Australia also use the M777 extensively

**The deal**

▪ Present deal with the U.S. is for 145 guns worth \$737 million. It has a 30 percent offset condition worth about \$200 million

▪ Under offset obligations, BAE Systems will set up an Assembly, Integration and Test facility in India

▪ 20 guns to be directly imported, remaining 125 to be assembled in India

▪ The guns are meant to equip the Army's new mountain strike corps in the Eastern sector facing China

▪ The Army has not inducted any new artillery gun since the 1980s

**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.

**Miscellaneous****5. ISRO gets Indira Gandhi Prize for 2014**

<http://www.thehindu.com/sci-tech/science/isro-gets-indira-gandhi-prize-for-2014/article18492069.ece>

**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.

## PRACTICE QUESTIONS:

### 1. 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 pre-planned 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

### 2. 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

### 3. 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.

### 4. 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

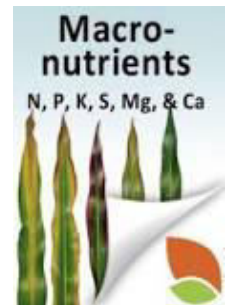
- B. 2,3 and 4 only
- C. 1 and 4 only
- D. 4 only

Correct answer: D

Type: Science

Level: moderate

Explanation: The macronutrients: nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), sulfur (S), magnesium (Mg)



## G.S.PAPER-2

### Topic: Polity

#### 1. Modi calls for 'evergreen revolution'

<http://www.thehindu.com/news/national/modi-calls-for-evergreen-revolution/article18510225.ece>

#### In news:

- Prime Minister Narendra Modi called for an “**evergreen revolution**”.
- Evergreen revolution enables the country to meet the challenge faced by the agriculture sector.
- We shall move from the concept of 'food security' to 'nutrition security', via scientific and technological intervention.

### Topic: Health Issues

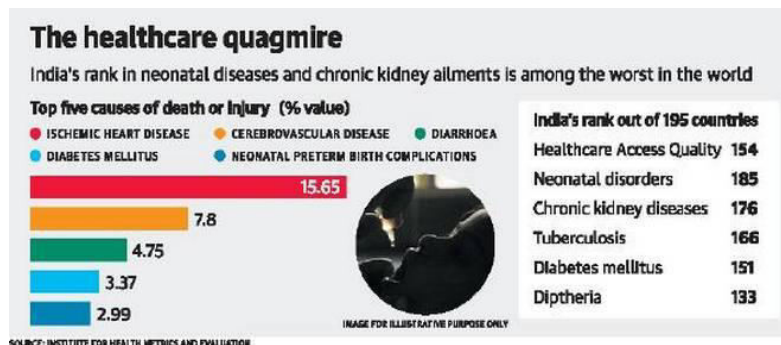
#### 2. Survival of newborns: India ranks lower than Somalia

<http://www.thehindu.com/todays-paper/tp-national/chance-of-newborn-survival-somalia-better-off-than-india/article18512384.ece>

#### 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



## G.S.PAPER-3

### Topic: Economy

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

<http://www.thehindu.com/business/kidnap-insurance-may-help-recoup-cyberattack-losses/article18510276.ece>

##### 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.

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

<http://economictimes.indiatimes.com/news/economy/policy/govt-proposes-law-to-take-properties-of-fugitive-eco-offenders/articleshow/58736812.cms>

##### 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

#### 3. Cabinet approves Industry-Academia Collaborative Mission for accelerating discovery research to early development for biopharmaceuticals

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=161877>

##### 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

**Topic: Science and Technology**

**4. Scientists bring 'limitless' blood supply closer to reality**

<http://www.thehindu.com/todays-paper/tp-national/scientists-bring-limitless-blood-supply-closer-to-reality/article18499492.ece>

**In News**

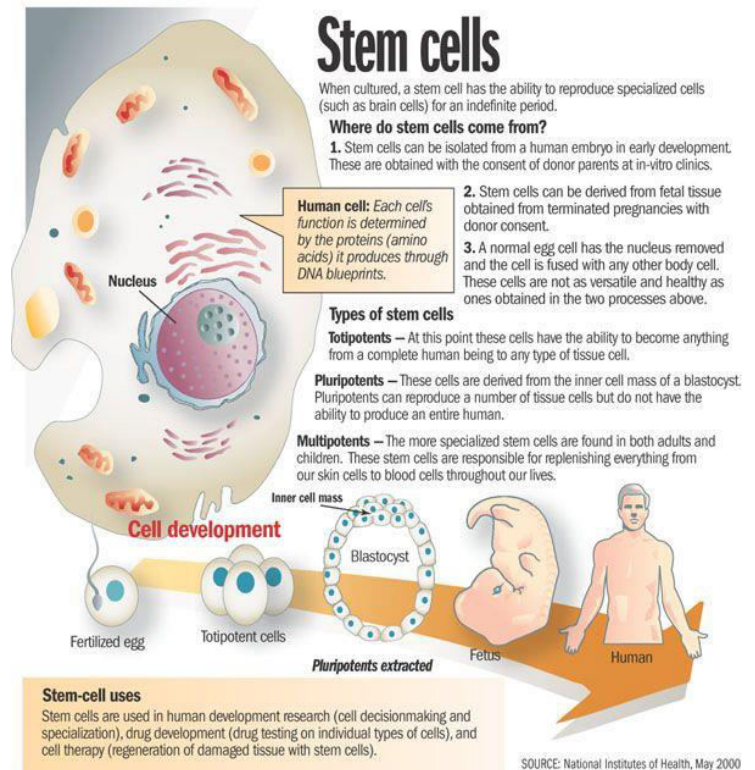
- Scientists have generated blood-forming stem cells in the lab which gives hopes of creating a limitless supply of human blood.

## 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.



## G.S.PAPER-4

### 1. Ex-Coal Secretary Gupta convicted

<http://www.thehindu.com/todays-paper/ex-coal-secretary-gupta-convicted/article18513077.ece>

**Case involved:** Irregularities in the allocation of a coal block in Madhya Pradesh.

#### Conviction:

- Former Coal Secretary H.C. Gupta
- Managing director of KSSPL Pawan Kumar Ahluwalia, then Joint Secretary in the Coal Ministry K.S. Kropha, and then Director, Coal Allocation-I Section, in the Ministry, K.C. Samaria.

**Charges:** guilty of criminal conspiracy, cheating and indulging in corrupt practices.

#### Issues involved:

- Corruption
- Integrity

- Transparency and Accountability
- Public service professionalism
- Conflict of Interest

## PRACTICE QUESTIONS

1. 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

2. 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.

3. 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

4. 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